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REPORT

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SCHOOL COMMITTEE

1899

SEVENTY-FOURTH ANNUAL REPORT
OF THE
SCHOOL COMMITTEE
OF THE
CITY OF LOWELL, MASS.
AND THE
THIRTY-SIXTH ANNUAL REPORT
OF THE
Superintendent of Public Schools
1899.



LOWELL, MASS. :
LOWELL SUN PRINT, SUN BUILDING
1900.

CITY OF LOWELL.

OFFICE OF THE SCHOOL COMMITTEE,

LOWELL, MASS., Jan. 1, 1900.

At a meeting of the School Committee, held Jan. 1, 1900, it was voted that the Committee on Reports, and the Superintendent of Schools, have leave to print their annual reports for the year 1899.

In accordance with this vote the reports are herewith submitted.

A. K. WHITCOMB, Secretary.

ORGANIZATION

OF THE

SCHOOL COMMITTEE, 1899

ANDREW G. SWAPP, President.

ARTHUR K. WHITCOMB, Secretary.

Ward 1—	AZRO H. SCHOOLCRAFT, 123 Prince St.	Term expires	1899
“ 2—	THOMAS J. MURPHY, 91 Dummer Street,	“ “	1899
“ 3—	CHARLES L. SWEETSIR, 276 Westford St.,	“ “	1900
“ 4—	JAMES E. DONNELLY, 36 Floyd Street,	“ “	1899
“ 5—	DENNIS J. MURPHY, 33 Tyler Street,	“ “	1900
“ 6—	FRANK K. STEARNS, 256 Lawrence Street,	“ “	1900
“ 7—	ANDREW G. SWAPP, 307 Pawtucket Street,	“ “	1899
“ 8—	WILLARD EVERETT, 12 Belmont Street,	“ “	1900
“ 9—	ALBERT G. THOMPSON, Lowell Post Office,	“ “	1899

STANDING COMMITTEES.

- ON TEACHERS.—Messrs. Swapp, Everett, Donnelly.
- ON BOOKS AND SUPPLIES.—Messrs. Stearns, Schoolcraft, Sweetsir, T. J. Murphy, D. J. Murphy.
- ON EVENING SCHOOLS.—Messrs. Everett, Swapp, Schoolcraft, Stearns, T. J. Murphy.
- ON HIGH SCHOOL.—Messrs. Thompson, Everett, Swapp, Donnelly, D. J. Murphy.
- ON PENMANSHIP AND DRAWING.—Messrs. Schoolcraft, Sweetsir, T. J. Murphy.
- ON MUSIC.—Messrs. Stearns, Thompson, Donnelly.
- ON REPORTS AND PRINTING.—Messrs. Thompson, Schoolcraft, D. J. Murphy.
- ON ACCOUNTS.—Messrs. Donnelly, Stearns, Sweetsir.
- ON SCHOOL-HOUSES AND HYGIENE.—Messrs. Sweetsir, Swapp, D. J. Murphy.
- ON RULES.—Messrs. T. J. Murphy, Thompson, Everett.

ASSIGNMENT OF SCHOOLS.

- MR. SCHOOLCRAFT.—Edson, Eliot, Kirk Street, Cottage Street.
- MR. T. J. MURPHY.—Green, Worthen Street, Cheever Street, Morrill, Worthen Street Kindergarten.
- MR. SWEETSIR.—Lincoln, Howard Street, Grand Street, Plain Street, Lincoln Kindergarten.
- MR. DONNELLY.—High, Butler, London Street, Weed Street, Agawam Street, Carter Street, Lyon Street, Agawam Street and Chapel Street Kindergartens.
- MR. D. J. MURPHY.—High, Charles Street, Central Street, Ames Street, Fayette Street.

- MR. STEARNS.—Varnum, West Sixth Street, Tenth Street, Lakeview Avenue, Billings Street, Varnum Kindergarten.
- MR. SWAPP.—High, Bartlett, Pawtucket, Training, Cross Street, Cabot Street, New Moody Street, Lexington Avenue, Pawtucketville, Training and Bartlett Kindergartens.
- MR. EVERETT.—High, Highland, Franklin, Dover Street, Powell Street, Pine Street, Middlesex Village, Franklin, Dover and Pine Street Kindergartens.
- MR. THOMPSON.—High, Moody, Pond Street, High Street, Sycamore Street, Moody Kindergarten.
-

ASSIGNMENT OF EVENING SCHOOLS.

- MR. EVERETT.—High, Mann.
- MR. SWAPP.—Bartlett, Green, Pawtucket.
- MR. STEARNS.—Varnum, Aiken Avenue.
- MR. SCHOOLCRAFT.—Edson, Colburn, Manual Training.
- MR. T. J. MURPHY.—Butler, Franklin.
-

ARTHUR K. WHITCOMB, Superintendent of Public Schools.
Office in City Hall.

OFFICE HOURS.—One hour after the forenoon session of schools, and from 2 to 3 o'clock on Saturday afternoon.

Telephone 566-4.

School Supply Room.

Open 8 a. m. to 12.30 p. m. and 1 to 5 p. m.

Telephone 549-5.

TRUANT COMMISSIONERS.

GEO. F. STURTEVANT. JAMES KELLY. WM. F. THORNTON.
CAMILLE ROUSSIN.

Office in City Hall, Third Floor.

OFFICE HOURS.—Saturday, 2 to 3 o'clock p. m. Other days 4 to 5 o'clock p. m., except during the summer vacation, when the office will be open from 9 to 10 o'clock a. m.

REGULAR MEETINGS OF THE SCHOOL COMMITTEE.

January 30.	February 27.	March 27.	April 24.
May 29.	June 26.	July 31.	August 28.
September 25.	October 30.	November 27.	December 27.

ORGANIZATION

OF THE

SCHOOL COMMITTEE, 1900

WILLARD EVERETT, President.

ARTHUR K. WHITCOMB, Secretary.

Ward 1—WILLIAM J. JOHNSON, 326 Merrimack St.,	Term expires 1901
“ 2—CORNELIUS A. DALY, 318 Suffolk St.,	“ “ 1901
“ 3—CHARLES L. SWEETSIR, 276 Westford St.,	“ “ 1900
“ 4—JAMES E. DONNELLY, 36 Floyd Street,	“ “ 1901
“ 5—DENNIS J. MURPHY, 33 Tyler Street,	“ “ 1900
“ 6—FRANK K. STEARNS, 256 Lawrence Street,	“ “ 1900
“ 7—ANDREW G. SWAPP, 307 Pawtucket Street,	“ “ 1901
“ 8—WILLARD EVERETT, 12 Belmont Street,	“ “ 1900
“ 9—ALBERT G. THOMPSON, Lowell Post Office,	“ “ 1901

STANDING COMMITTEES.

- ON TEACHERS AND SALARIES.—Messrs. Swapp, Everett, Donnelly.
- ON BOOKS AND SUPPLIES.—Messrs. Stearns, Thompson, Sweetsir, Murphy, Johnson.
- ON EVENING SCHOOLS.—Messrs. Everett, Swapp, Stearns, Thompson, Daly.
- ON HIGH SCHOOL.—Messrs. Thompson, Everett, Swapp, Donnelly, Murphy.
- ON PENMANSHIP AND DRAWING.—Messrs. Sweetsir, Stearns, Johnson.
- ON MUSIC.—Messrs. Stearns, Thompson, Donnelly.
- ON REPORTS AND PRINTING.—Messrs. Murphy, Sweetsir, Johnson.
- ON ACCOUNTS.—Messrs. Johnson, Everett, Daly.
- ON SCHOOL-HOUSES AND HYGIENE.—Messrs. Sweetsir, Murphy, Daly.
- ON RULES.—Messrs. Donnelly, Daly, Swapp.

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- MR. JOHNSON.—Edson, Eliot, Kirk Street, Cottage Street.
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MR. EVERETT.—High, Mann.

MR. SWAPP.—Bartlett, Green, Pawtucket.

MR. STEARNS.—Varnum, Aiken Avenue.

MR. THOMPSON.—Edson, Colburn, Manual Training.

MR. DALY.—Butler, Franklin.

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10 ORGANIZATION OF THE SCHOOL COMMITTEE, 1909.

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January 29.	February 26.	March 26.	April 30.
May 28.	June 25.	July 30	August 27.
September 24.	October 29.	November 26,	December 31.

REPORTS.

REPORT OF THE SCHOOL COMMITTEE.

Many years ago a law was enacted and placed upon the public statute book requiring School Committees to make annually a detailed report of the condition of the public schools, and the Committee in presenting their annual report will endeavor to review the work in as condensed form as possible, and to submit such suggestions as appear to them to be desirable for consideration.

VALUE OF THE PUBLIC SCHOOLS.

It would be useless for the School Board of 1899 to attempt to add anything to the establishment of the public schools in the minds and the hearts of all the people in this beautiful land of ours. The people of all classes regardless of race, creed or condition, rise up to bless the public school system. It has the warmest place in the heart of every individual in this country.

We therefore start out with popular education as one of the most important subjects, with the right to claim the most careful attention of a free people; a safeguard of state and nation, and the wellspring of our national being. No question can equal it in importance to the whole people.

The School Board and the citizens at large are to be congratulated on the continued prosperity of the schools, on the faithfulness of the superintendent and the teachers, and all that are directly interested in their government. The standard has been advanced steadily until we believe that Lowell schools are second to none in the state. This high standard has been attained by long and faithful work of those directly interested in their management. Many reforms have entered into the work during the past few years and one entirely new system has been adopted, to wit: the absolute merit system in selecting teachers. It was very hard to get such a principle into the hearts of the people. The great conflict came on its introduction. Men of all political parties that had the best interests of the schools at heart believed in it and fully understood that once it was tried, it would be established for all time. That system was tried; it

is now established; no power can come that will ever change it in Lowell. Men may differ politically; it is right that there should be more than one political party, and the great parties may differ honestly upon questions that affect the business of the country, but we feel sure that no matter how we may differ on all other questions affecting the people in any and every other way, that we are one party and one mind that the merit system is the one that means good schools, faithful and efficient teachers, and a steady advancement in our great system of education, that we all appreciate and love.

ADVANTAGES GIVEN TO THE CHILDREN OF LOWELL.

It has been the aim of the noble men and women interested in education to bring it to the door of every person. They have not only been invited to knock, but to enter the doors that are opened wide for all; those that have unlimited means to give their children every advantage that money can procure are very limited in number. We are an industrious people and enjoying great advantages in every way, yet the great majority of us have only limited means, and how much we

are to be thankful for that this wonderful system of education has been brought to our very door. We have the day school, from the kindergarten to the college. We have the system of evening schools that are doing a world of good, and both day and evening the good work goes on. So we can rejoice with those who have struggled so long and faithfully to bring about what we have today; that the privileges and advantages of education are to all, rich and poor alike, as free as the air we breathe.

SCHOOL HOUSES.

It is believed by every member of the School Board, present and past, that they should have the care and control of all school buildings, and that the supervision over the construction of school houses should be vested in the School Board. It often happens that the strongest suggestion from the School Board is given no consideration by the committee of the city council in charge of the erection of school houses. The appointment and control of all the janitors are in the hands of the members of the city council. If there happens to be an inefficient janitor and one wholly unfit for

his duties, the sub-committee, who has the care of the school in the same buildings with the incompetent janitor, has no power or authority over him if he happens to be a friend of some member-elect of the city council who does not give his best thought for the interests of the school he would be permitted to remain, no matter how strong the protest from the members of the School Board. That all these things have been true, there is not the slightest doubt. But we are very much pleased to say, that notwithstanding just causes have been given to complain by some past city councils, nothing of the kind can be charged to the city council of 1899, and we wish to here return our sincere thanks to the committee on education and to the city council of 1899 as a whole for their faithful co-operation, and their earnest endeavors to do all in their power to assist the School Board in promoting the interests of our grand system of education.

EXPENSE OF MAINTAINING SCHOOLS.

This is one of the broadest and most varying subjects that interest the minds of the tax-payers.

We do not wish to be misunderstood that men who bear the burden of taxes ever complain of the money expended for the public schools, but like the foundation of the schools themselves all parties agree that the proper amount of money for their best interest should be expended. We, in our long experience as members of the School Board, have never heard one person complain, no matter what his politics, creed or condition was, of the money expended for the public school system. The difference comes, and only comes, on methods. We have the benefit, as members of the School Board, of the advice and counsel of an able and efficient Superintendent of Schools, backed up by the best minds along educational lines in the country, and it is the opinion of the very best educators, those who have the keenest interest in the advancement and uplifting of the educational world, that influences the minds and actions of the School Board. Like all great questions, educators vary as to their opinion of methods; some believe that we have departed too far from the old lines. It will be seen on reflection that there have been very many innovations upon the old time curriculum. Within the past few years drawing, sewing, mili-

tary instruction, calisthenics, music, kindergartens and manual training, have all been established as a part of the public school system.

Now, it would take a master mind to say, in view of all the facts and for the good of all, which, if any, of these, could be dispensed with and the pupils benefitted by more time given along the old lines. Some would say cut out drawing, some sewing, some military instruction, some calisthenics and physical culture, some music, and some the kindergarten. Upon all these there is a very wide difference of opinion. The public have demanded them; they were kept out of the Lowell Schools, many of them, for years after they were in successful operation in other cities and towns. So that it will be seen that the public had a right to demand of the Lowell schools as complete and thorough training of their children as any other citizens of the Commonwealth. Now, all of these, profitable lines as they are, cost money. Lowell has been slow to move in new channels, the public has had a right to demand changes long before they came, as it has always been the policy not to introduce the new studies until they could come into our system well fortified by having been

tried and proven successful for some years previous in other public schools.

The establishment of manual training as a part of our system was by legislative act, and is compulsory, and we believe it was wisdom on the part of the legislature. Its introduction meant a heavy expense, and Lowell was not alone in refusing its admission. Other cities, as well as ours, although realizing fully the need of such an institution, hesitated when the fact of heavy taxes stared them in the face, to introduce a course of manual training which meant a great outlay of money. But some of the cities did establish it; some were most fortunate in having public spirited men with means who contributed hundreds of thousands of dollars for the building and equipment of these most profitable institutions. The citizens of cities which did not have such established schools felt that their children were deprived, and had a right to feel that they were deprived, of the great advantages of such a course. They had visited cities that did have them, cities in other states outside of our own, and their great value was so apparent that their appeal was made in the strongest possible way to the last resort, the general court, and

that body passed an act that became a law, compelling cities to maintain manual training as a part of the school system. And as we look upon it today the wisdom, the advantages and the blessings of such a course cannot be over estimated. It has meant a large outlay of money. Since its introduction into our system it has been laboring under great disadvantages, cramped quarters, insufficient material to work with, all tended to deprive the pupils of the greatest amount of benefit; but we are to be congratulated that through the kindness and faithfulness of the committee on education and the city government of 1899, we shall soon be in a position to place this important branch of our system upon a plane with any other subject in our schools. We shall refer to this school later under the head of High School.

TRAINING SCHOOL.

Work at this institution, has, from the very nature of things, been a little different from former years, the committee having given the preference to the graduates of the State Normal School of Lowell. The committee on teachers and training school have labored most faithfully and earnestly

to blend the Normal School into our system in a way that would in every way preserve our foundation rock, THE MERIT SYSTEM. Some slight changes may be necessary for the best results. The school is conducted in the most thorough, enthusiastic manner by its very able principal and her assistants. It is evident that more room will be needed in the near future to carry on the work of the Training School. All of the teaching is done in that school district by the Training School the same as in any other grammar school district, through the primary and grammar schools of its district, and at about the same expense; therefore it can be seen that our Training School system as conducted, gives to the schools of the city all the benefit of trained and competent teachers without any extra expense. If the Training School district shows a slight increase in expense it comes in this way: the people living in that grammar school district cannot be neglected, their children must receive just as good training as the children of any other district, and to bring about that result it has been necessary at times to employ a larger average number of teachers than for the same number of pupils in other districts.

KINDERGARTENS.

The kindergartens have been well attended and great interest has been manifested in them. They have been presided over, both by superintendent and teachers, in an able and perfectly satisfactory manner.

PRIMARY SCHOOLS.

The numbers have increased, and the usual good and efficient work has been done. We believe that the teachers in the primary department fully understand that they come next to the mother of the children; that they have been earnest and faithful in their endeavors to lay well the foundation upon which to build the structure of character and education.

GRAMMAR SCHOOLS.

Most excellent work has been done in the grammar schools. We all agree that these schools are the schools of the people; that it is only a small per cent. that go beyond the grammar schools. We believe that the masters and teachers of these schools are hard, faithful and painstaking workers, with the interests of every child placed upon their responsibility.

LOWELL HIGH SCHOOL.

We believe the Lowell High School to be one of the most progressive and well managed in the state. The teachers are enthusiastic, competent, and united, which means for any institution the very best results.

With the completion of the High School annex on Paige and John Streets, it will be possible to transfer the manual training department from the old Moody School to this new building. One end of this building is arranged for manual training work. A capacious drill hall occupies the basement, while the floor above will be used for recitation rooms.

The arrangements for military drill, manual training, and other courses made possible by the construction of this building are a vast improvement over the present conditions. We shall now be able to establish in the High School a course which has been demanded by the general public of the City of Lowell for a long time, and in the opinion of your committee has been rightly demanded. Your committee feels that a commercial course may be so arranged that it will furnish the same amount of mental training and mental power

as any other High School course, and at the same time give some practical knowledge of commercial detail and commercial work. Under such conditions, your committee believes that it will prove a valuable acquisition to the High School curriculum.

The added room given by the annex will provide accommodations for a few years only. In September of this year the attendance at the High School was 860. The average increase of attendance in the High School is about 60 each year. The annex and the main building will furnish seating accommodations for 1150 scholars. It will be seen that High School pupils, assuming the average yearly increase in attendance to be 60, will be accommodated for only five years, and at the close of that period a new High School will be necessary. If a new High School must be ready for occupancy for 1905, the year 1900 is none too early to make preliminary plans for the construction of the building.

A WORD TO THE PUBLIC.

We most cordially and earnestly invite you to visit the schools, show your appreciation of them, stimulate and encourage the teachers by your pres-

ence, spare a little time to show your great interest in the education of your youth. We believe that our schools are good schools and we have reason to be proud of them. We believe they are broad enough so that no diligent pupil cannot fail to acquire the good of an education with the highest standard of moral and intellectual character.

Respectfully,

ALBERT G. THOMPSON,

DENNIS J. MURPHY,

A. HYDE SCHOOLCRAFT.

REPORT OF THE SUPERINTENDENT OF SCHOOLS.

OFFICE OF THE SUPERINTENDENT OF SCHOOLS,

DECEMBER 30, 1899.

GENTLEMEN OF THE SCHOOL COMMITTEE:

In accordance with your rules I have the honor to submit the following as my report for the year 1899:

SUMMARY OF STATISTICS.

Value of real and personal property	\$ 71,255,587
Population, estimated (84,359 by census 1895)	90,000
Number of polls	24,882
Increase for the year	356
Number of children between five and fifteen years of age, Sept. 1, 1899	14,449
Ward One, 1065; Ward Two, 1488; Ward Three, 1285; Ward Four, 1586; Ward Five, 1191; Ward Six, 1875; Ward Seven, 2896; Ward Eight, 1615; Ward Nine, 1448.	

Number of public schools	46
One High, nine Grammar, thirty-three Primary two Mixed, one Training.	
Number of Kindergartens	12
Number of public school buildings	52
Number of school rooms in actual use	272
High, 28; Grammar, 114; Primary, 113; Mixed, 4; Kindergarten, 13.	
Number of elected teachers employed, Dec. 31, 1899	268
High School, nine men, eighteen women.	
Grammar Schools, nine men, ninety-four wo- men.	
Primary Schools, one hundred and two women.	
Training School, four women.	
Mixed Schools, three woman.	
Kindergartens, twenty-four women.	
One supervisor of kindergartens.	
One teacher of penmanship.	
One teacher of drawing.	
One teacher of music.	
One teacher of sewing.	
One military instructor.	
Number of temporary teachers employed	40
Number of teachers of Evening Schools, term of 1898-'99	132
Whole number enrolled in Evening Schools, term of 1898-'99	3,683
Whole number enrolled in day schools	12,823
Whole number enrolled in Kindergartens	1,083
Average number belonging to day schools	10,110
High, 814; Grammar, 4621; Primary, 4555; Mixed, 120.	

Average number belonging to Kindergartens . . .	474
Average attendance	9,279
High, 776; Grammar, 4280; Primary, 4119; Mixed, 104.	
Average attendance in the Kindergartens . . .	372
Average number belonging to each teacher . . .	37
High, 30; Grammar, 37; Primary, 39; Mixed, 30.	
Average in Kindergartens	18
Average belonging to each room	39
High, 29; Grammar, 41; Primary, 40; Mixed, 30.	
Average number belonging to each Kindergarten.	36
Average per cent. of attendance	92
High, 95; Grammar, 93; Primary, 90; Mixed, 87.	
Average per cent. of attendance in Kindergartens.	78
Average cost of each pupil, for tuition only, based on the average number belonging . . .	\$18.09
High, \$29.60; Grammar, \$17.77; Primary and Mixed, \$14.86.	
Average cost in Kindergartens	\$24.75

RECEIPTS AND EXPENDITURES.

RECEIPTS.

Appropriated and assessed in 1899	\$276,000.00
Appropriated Jan., 1899, to pay bills of 1898 . . .	539.43
Receipts and transfers	408.10
Total standing to credit of schools	<u>\$276,947.53</u>

EXPENDITURES.

Paid to teachers of Day Schools:—

High School	\$24,095.50	
Grammar Schools,—Bartlett School, \$ 8,843.89		
Butler School, 11,403.72		
Edson School, 8,355.40		
Green School, 8,449.72		
Highland School, 10,949.17		
A. Lincoln “ 7,000.80		
Moody School, 6,384.15		
Pawtucket School, 5,470.00		
Varnum School, 9,787.57		
		76,644.42
Primary and Mixed Schools	66,999.94	
Training School	10,410.10	
Kindergartens	11,732.00	
Special Teachers	4,751.54	
Total paid for instruction in day schools .	\$194,633.50	
Evening Schools:—		
Teachers	\$12,049.75	
Janitors	1,427.25	
		13,477.00
Drawing School:—		
Teachers	\$3,787.50	
Janitor	87.00	
		3,874.50
Cost of Supervision :		
Salary of Superintendent of Schools \$3,000.00		
Office assistant	400.00	
Amounts carried forward	\$3,400.00	\$211,985.00

Amounts brought forward . . . \$3,400.00 \$211,985.00

Truant officers and assistant in sup-

ply room 3,860.85

7,260.85

Total of Salaries \$219,245.85

Fuel \$14,482.62

Water 1,522.44

Gas for day schools 410.30

Gas for evening schools . . . 1,229.00

Bills of Superintendent of Public Build-
ings for repairs 3,154.69

Repairs, furniture, curtains, etc . . 1,381.52

Text books 8,073.02

Writing books, drawing books, stationery,
etc. 5,006.72

Supplementary reading 1,090.97

Bills of Middlesex County, board of
truants 2,312.81

Manual Training, equipment, etc. . 2,304.94

Manual Training building . . . 534.90

Printing, including annual reports . 907.73

Kindergarten, equipment and supplies . 438.85

Supplies, Manual Training School . 307.11

Janitors' supplies 1,832.97

Board of horses, repairs of wagons,
etc. 700.71

Power for ventilating purposes . . 1,003.17

Electric lighting 351.26

Rent of telephones 260.94

Amounts carried forward . . . \$47,306.67 \$219,245.85

<i>Amounts brought forward</i>	.	.	\$47,306.67	\$219,245.83
Material for sewing classes	.	.	261.79	
Pianos, etc.	.	.	753.50	
Apparatus and material for High School	.	.	613.93	
High School regiment	.	.	552.98	
High School graduation	.	.	425.39	
Training School, graduating exercises,				
etc	.	.	97.60	
Electric clock, etc., Highland School	.	.	495.00	
Miscellaneous	.	.	2,901.42	
Total of bills	.	.	.	53,408.28
Total expenditures	.	.	.	\$272,654.13
Balance to general treasury fund	.	.	.	4,293.40
				\$276,947 53

SCHOOL HOUSES.

RECEIPTS.

Appropriated and assessed	.	.	.	\$44,000.00
Received from other sources	.	.	.	5,646.36
Total	.	.	.	\$49,646.36

EXPENDITURES.

Janitors	.	.	.	\$29,143.10
General repairs	.	.	.	20,503.26
Total	.	.	.	\$49,646.36

ADDITION TO VARNUM SCHOOL.

Balance on hand Jan. 1, 1899	\$ 954.48
Appropriation from the general treasury fund.	245.12
Total	\$1,199.60
Expenditures	1,199.60

MOODY STREET SCHOOL.

Balance on hand Jan. 1, 1899	\$1,606.90
Expenditures	1,606.90

HIGH SCHOOL ANNEX.

Appropriation	\$29,500.00
Expenditures	12,695.15
Balance Dec. 31, 1899	\$16,804.85

The census of children between five and fifteen years of age was taken in September this year for the first time, and was taken by the truant officers for the second time. The increase of 356 polls {during the year pointed to a probable increase in the number of children, but the result of the census showed a gain so much greater than that in the number of polls, (from 12,980 in 1898 to 14,449 in 1899,) as to indicate that a September census is more likely to be complete than one taken in May, as heretofore. The house to house visitation by the truant officers also disclosed any cases of non-attendance at school which needed attention, and so accomplished some good in that respect. The cases of absence were few, however,) much fewer than had been expected, indicating that the school attendance law is generally well obeyed.

The taking of the census began September 1, and was not finished until the last of October, though two of the officers completed their wards some weeks earlier. In anticipation of the fact that the other officers would be so occupied with census taking that they could give little time to their usual work in September, Mr. Sturtevant, who did no census taking himself, made a great effort to have all supplies so distributed to schools in advance that he would have much time to give to calls for field work. Teachers were notified that the bi-weekly call of the truant officers would be omitted until the census was completed, but that all calls for service which were made at the office would receive prompt attention. In the event of such calls being more numerous than could be attended to by Mr. Sturtevant an officer was taken from census work for a few hours to help in looking up truants or absentees, but such occasions, happily, were not many. Teachers, however, did not, probably, send to the office as many cases of absence as they would have reported to an officer had he called at their schools, and there was undoubtedly some loss in efficiency in the regular work of the truant officers in the first four or five weeks of the school year. In most parts of the city no special harm was observable on this account, but in one or two places a start in the wrong direction was made by some boys which was not checked until a part of the clique, for truants almost always go in gangs, had been sent to the truant school. With the experience of this year to help us we shall try to make the loss still less next year, but that there will be some loss is almost inevitable if the census is to be taken by the truant officers, and whether it will be great enough to demand a return to the employment of paid enumerators is a question yet to be settled.

School attendance still continues to increase, though but

slowly. In enrolment the gain has been 516, and in average number belonging 329. That the increase in enrolment is so much larger than the increase in number belonging is probably due to the fact that owing to the closing of the St. Patrick's school for boys in May and June a good many boys of that school came to the public schools to swell the enrolment, but being present only a part of the year they did not correspondingly increase the average number belonging. The largest gain in attendance, relatively, has been in the High School, which has gained 61, but in actual numbers the primary schools lead with a gain of 261. The grammar schools have gained 11 and the kindergartens have lost 4.

The number of pupils to the teacher is less than before, a matter of congratulation for those who think small numbers essential to good work, and probably a matter of criticism for those who desire to reduce expenses. The number per teacher, however, is really larger, in some of the schools at least, than is indicated by the figures on page 29. The number in the High School, for instance, is given as 30, but in obtaining this number, the master of the school and the special teacher of elocution are both counted as teachers, and no account is taken of the fact that the divisions which take manual training are much smaller than the average. Allowing for this fact and omitting from the list the names of Mr. Irish and Miss Hussey and the number is raised to at least 33, which is the real average for the teachers of the main building, and is exceptionally large as compared with similar schools anywhere else. Probably more teachers will be employed and the number of students per teacher somewhat reduced when the new annex is finished.

When all permanent positions are held by elected teachers the number of pupils per teacher would, of course, be found

by dividing the number of pupils belonging by the number of elected teachers. This year, however, the end of the year finds so many permanent positions held by teachers who are in their places by appointment that it is necessary to any statement of real conditions to include them in the number of teachers actually in service. In the primary schools, for instance, there are but 102 elected teachers, but there are 116 in regular service, and the latter number is therefore used as a divisor. Grammar masters, who teach classes about half the time, are included in finding the average to the teacher in grammar schools. Had they been omitted the average would have been raised from 37 to 40.

The total appropriation for schools in 1898, including an appropriation of \$2,870.83 made in January of that year to pay bills of the previous year, was \$280,870.83, and an unexpended balance of \$7,412.36 was returned to the city treasury at the end of the year, a fact which instead of gaining for the department any credit was made a reason for a reduction in 1899. For the latter year an appropriation of \$276,000.00 was finally made, with \$947.53 more allowed for the payment of back bills. As was anticipated the salaries of day school teachers have been more than \$2000 greater this year than in 1898, not because any salaries have been raised but on account of the employment of more teachers; fuel has cost more by \$1000, and there has been a small increase in several other items of necessary expenditure. By the exercise of the closest economy, however, on almost all points where reductions were possible, expenditures have not only been kept within the appropriation but have actually been made less by \$804.34 than in 1898! With 422 more pupils belonging to our schools today than belonged one year ago, and with a correspondingly larger number of teachers in service, expenses certainly cannot

go on decreasing. On the contrary an increase is inevitable. The average cost of the schools per pupil this year, for salaries of teachers only, has been \$18.09. The addition of 422 pupils, at the same average rate for expenses, would mean an increase of \$7,632.88 in salaries alone, and it is evident that it will require the strictest economy to finish the year 1900 within an appropriation of \$280,000.

SCHOOL HOUSES.

The school houses of the city number 52, the same as last year, and are valued at \$1,588,700. No new building has been erected during the year, and no extensive repairs have been made in any old one. Many minor repairs, such as new floors, new windows, new paint, varnish, kalsomining, etc., have been made, but these have been far less than were required and far less than would have been made had the Superintendent of Buildings been able to get the money, the need of which he recognized and for which he asked. It is to be hoped that more money will be appropriated and more work will be done next year. Of the rooms reported as unoccupied last year one has been filled with pupils at the Lincoln School, one at Billings Street, one at Middlesex Village, and one at Chapel Street. A new room has also been added at the Manual Training building, and the Highland has two classes in its assembly hall. The two rooms at Sycamore Street have been combined in one, so that the net gain is six, making a total of 272.

At the first regular meeting in January the School Committee made a formal request of the city council for "further needed accommodations for the High School by the erection of a building at or near the present High School building on Kirk Street." A hearing on the subject was granted by the city

council. Feb. 14, and an order was passed July 11 for a loan of \$29,500 with which to erect a building on the land already owned by the city at the corner of John and Paige Streets. Work on the foundation was begun in August, but so much ledge had to be removed that progress was slow and the end of December finds the walls only in process of erection. It is proposed to continue work whenever the weather will permit, and it is hoped to have the building ready for occupancy in September, 1900.

The building now being erected is 220 x 65 feet, and two stories high. The first story, or basement, will contain a boiler room, a drill hall 153 x 62 feet, with cement floor, and a forge room for manual training classes, 63 x 29 feet. The drill hall will be 20 feet in height, with galleries on both sides, but the forge room will be only half as high and over it will be a wood turning room of the same size. The upper story will contain a carpentry room over the wood turning room, also 63 x 29 feet, five class rooms 36 x 27 feet, and four smaller recitation rooms. One of the large rooms will be needed as a drawing room for manual training classes, so that the number left to be used to relieve the overcrowding at the old building will be but few, and the relief will be but temporary. The new building is excellent for its purpose; and the only thing to regret is that it does not contain another story, as it might just as well as not, and so at a cost of \$10,000 or so save the city the probable expense of \$200,000 which must come in a few years, if the High School continues to grow as we have every reason to expect, to defray the cost of another building in another part of the city.

Four buildings now have in each one or more rooms too crowded to be cared for by one teacher, the Highland Grammar and the Grand Street, Lakeview Avenue and West Sixth

Street primaries. At the Highland temporary relief is found by putting two classes in the assembly hall. To afford permanent relief the School Committee has asked the City Council to enlarge the present building by an addition to contain at least four rooms. Since this request was made it has been suggested that the unfinished third floor opposite the assembly hall of the present building would afford space for finishing two good rooms, at very moderate expense. Two rooms are all that are needed at present, and I suggest that the City Council be asked to furnish the needed relief in this way, letting the request for an additional building rest until the need for it shall again become imperative.

The need of more room at Grand Street is equally pressing, and less easy to provide for. This building is one of the oldest and poorest in the city. The rooms are smaller than in any other house, which makes overcrowding even more unhealthful and inconvenient than elsewhere. At present we have two teachers in the room on the first floor, with an overflow room of 40 pupils in the Lincoln School building. This latter class is well housed at present, but is sure to be crowded out of its present quarters by the needs of the grammar school before many years. The Howard Street house, of which the Grand Street is counted as an annex, is a fairly good house with large rooms, but it is situated at one side of its district instead of in the middle of it as it should be, and the only adequate relief for the whole section must be found in the erection of a new building of not less than eight rooms, centrally located, to which should be transferred the pupils from both Grand and Howard Streets, together with the overflow room at the Lincoln. To teach these pupils six teachers are now employed. If a new building was ready for use today we should at once occupy six of its rooms, and two extra

ones are none too many for the rapidly growing district in which it would be situated.

The Centralville schools can best be relieved by an addition to the Lakeview Avenue School, or by a new building to the north of it. This school has had some strange fluctuations in members in the past, having been crowded four years ago but only passably well filled two years ago, so that it is, perhaps, as well to wait a little before beginning very extensive measures for its relief at the present time.

SCHOOLS AND TEACHERS.

In the character or location of schools very few changes have been made in the year, the principal variation from the established order having been the reopening for a time of the old Bartlett School building on Clark Street. Early in March a fire occurred in the St. Patrick's Parochial School for boys on Suffolk Street which rendered the building unfit for use, and the school department was notified Saturday, March 11, that it would be necessary to provide immediate accommodations for 432 new scholars. A reply was sent the same day stating that all applicants would be received at once at the public school nearest their residence, and that the old Bartlett School building would be reopened on Monday to provide for any for whom room might be lacking in other buildings. So many of the newcomers were accommodated in schools already existing that it was found necessary to open but four rooms at the old Bartlett, with about 40 pupils to the room. These rooms were continued in use until July, but were not needed in September, the Parochial School building having been repaired in the meantime, and many of the scholars formerly in attendance there having returned. The school at the old Bartlett was a very pleasant and successful one while it lasted,

and it is a matter of satisfaction to the school department that it was able to care for so many new scholars on so short a notice with no break or jar, and to the satisfaction, so far as known, of all concerned.

In September the Training School Kindergarten was moved to the Charles Street Primary School building, and one teacher of the Charles Street School was transferred to Chapel Street to make room for it. The Kindergarten has been greatly helped by the change, its attendance having nearly doubled, the Charles Street School has not needed the fourth teacher, while one has been absolutely necessary at Chapel Street, so that the change seems to have been for the best good of all the schools affected by it.

Following are the changes in the roll of teachers during the year :—

DIED.

Term of
Service.

Sarah A. Bradley, Varnum School	42 years
John J. Hunt, Teacher of Penmanship	5 "

RESIGNED.

Carrie A. Miles, Green School	17 "
Annie E. King, Highland School	4 "
Laura E. Lee, Plain Street School	26 "
Jeannette T. Costello, Sycamore Street School	6 "
Emily S. Abbott, Plain Street School	1 "
Elizabeth W. Frost, Moody School	42 "
Emma Manning Huntley, Teacher of Physical Cul- ture and Elocution	9 "
Nellie T. Gilday, Cabot Street School	13 "
Clifford R. Harris, High School	2 "
Frances M. Talbot, Bartlett School	17 "
Lillian L. Sproat, Powell Street School	4 "

Ellen F. Coughlan, Morrill School	46 years
Marietta F. Crowley, Lakeview Avenue School . .	20 "
Elizabeth McDaniels, High School	30 "

TRANSFERRED.

Agnes T. Courtney, from the Lakeview Avenue School to the Morrill School.

Margaret M. Harrahan, from the Charles Street School to the Cottage Street School.

Gertrude C. Ring, from the Carter Street School to the Middlesex Village School.

Gertrude L. Sponholtz, from the Highland School to the Varnum School.

Lena M. Robinson, from the Varnum School to the Plain Street School.

Ellen J. Piper, from the Lincoln Kindergarten to the Powell Street Primary School.

Elsie M. Cragin, from the Worthen Street Kindergarten to the Lincoln Kindergarten.

Helen W. Noyes, from the Franklin Kindergarten to the Worthen Street Kindergarten.

Martha Rogers, from the Middlesex Village School to the Lakeview Avenue School.

ELECTED.

Bertha J. Curtis, to the Bartlett School.

Viola G. Burr, to the Bartlett School.

Anne Marjorie Day, to the High School.

Alice D. Sunbury, to the Bartlett School.

Frances Clark, to the Bartlett School.

Fred W. Putnam, to the High School.

Willard E. Everett, to the High School.

Helen Buttrick, to the High School.

Mary Hussey, to the High School.

Hortense Lamere, to the Franklin Kindergarten.

S. Alice Knapp, to the Worthen Street Kindergarten.

Ethel Baker, at the Charles Street Kindergarten.

The death of Miss Bradley takes from us one of our oldest teachers in point of service yet one whose health had generally been so good and whose temperament had been so buoyant that she had never seemed old at all. Miss Bradley never petted her scholars, and she marshaled them sometimes much as a military officer might marshal his men, but her pupils never misunderstood the great heart which underlay any possible brusqueness of manner, and almost without exception they honored and loved her. Such a life, happily, cannot be lost and in the lives of her many pupils Miss Bradley still lives, a power for good.

In the death of Mr. Hunt the city suffered another loss of no ordinary kind. Mr. Hunt had the gift of inspiring enthusiasm in a very unusual degree. He gave his best to his pupils without stint, and they responded in kind, as scholars will always do under similar circumstances. His place has not been filled and will not be.

The faithful work as well as the long term of service of Miss Coughlan of the Morrill School make her retirement a matter worthy of mention. For forty-six years she had taught if not in the same house yet practically in the same school, and two generations rise up to call her blessed. May she long live to enjoy a well-earned rest. Miss Frost, who retires with forty-two years of service to her credit, was for many years first assistant in the Colburn School, and has always held a leading position as a teacher. In the retirement of Miss

Lee from Plain Street and Miss Crowley from Lakeview Avenue the city loses two of its strongest and most devoted primary school principals, and they will be greatly missed. The others, though mostly younger in point of service, were all good teachers, and the ability of their successors will be taxed to its utmost to really fill their places.

HIGH SCHOOL.

To relieve as far as possible the crowded condition of the High School building, seats and desks for students have been placed in the library room and in the chemistry lecture room, and both are now in regular use as class rooms. The assembly hall and both landings at the head of the stairs on the third floor are also utilized for recitation purposes, and it is evident that the annex can come none too soon.

Although the School Committee has as yet taken no action upon the subject, it is pretty well understood that the opportunity for expansion offered by a new building will be used to add a commercial course to the other courses now offered by the High School. Such a course was strongly advocated in an annual report as far back as 1891, but lack of room has so far made its establishment impossible. Such courses are popular elsewhere, the demand for one here seems to be general, and it should be provided as soon as class-room space will permit.

Diplomas were given at the close of the school year to 141 students, of whom 66 were in the four years' course.

Graduation exercises were held in the Lowell Opera House, June 28. Following is the

PROGRAMME.

1. MARCH.

AMERICAN ORCHESTRA.

2. OVERTURE. Tannhauser *Wagner*

AMERICAN ORCHESTRA.

3. CHORUS. Praise Ye the Father *Gounod*

4. SALUTATORY. The Three-fold Destiny.

ELLA MAUDE COFFIN.

5. CHORUS. 'Tis Morn *Adam Geibel*

6. ADDRESS. /

HON. HARVEY N. SHEPARD.

7. CONCERT WALTZ. The Angel's Dream *Tobani*

AMERICAN ORCHESTRA.

8. PRESENTATION OF PICTURE BY CLASS OF 1889.

MR. CARL D. BURT, for the Class of '89.

PRESENTATION OF PICTURE BY CLASS OF 1899.

SAMUEL FAY BARROWS, for the class of '99.

ACCEPTANCE FOR THE SCHOOL.

MR. FRANK K. STEARNS, Member of the School Committee.

9. VALEDICTORY. Discipline.

JOHN JACOB ROGERS.

10. CHORUS. To Thee, O Country. National Hymn.

11. PRESENTATION OF CARNEY MEDALS.

HONORABLE MENTION made of those who have
attained a scholarship rank of 90 per cent.

SUPT. A. K. WHITCOMB.

12. WALTHER'S PRIZE SONG. From Der Meistersinger.

AMERICAN ORCHESTRA.

Wagner

13. PRESENTATION OF DIPLOMAS.

His Honor the Mayor, JEREMIAH CROWLEY.

14. SINGING OF CLASS ODE.

Words by HELEN ESTELLE BOWERS.

Music by JOSEPH HAYDEN, German composer, 1732-1809

Classmates, now the bond we sever
That has held our lives as one;
Sadly comes the thought that never
Can these happy hours return.

Though our hearts are filled with sor-
row

As we clasp the parting hand,
Hope points out a bright tomorrow,
Bids us onward turn our gaze.

What the future holds is hidden;
None can lift the mystic veil.
We to do our best are bidden,
Calmly then to wait the end.

Heavenly Father, may Thy blessing
On this waiting class descend,
And the love past all expressing,
Guide us till our task is done.

15. AMERICA.

The audience is invited to join with the school in singing.

16. FINALE. The Charlatan *Sousa*

AMERICAN ORCHESTRA.

Graduates for 1899.**FIVE YEARS' COURSE.**

Victor Macomber Cutter.

FOUR YEARS' COURSE.

Samuel Fay Barrows.	Christine Cushing.
Ralph Melville Bean.	Lillie Stiles Cutler.
Charles Henry Conant, Jr.	Frances Wilhelmine Dalrymple.
Robert Faulkner.	May Leah Eveleth.
Warren Wyman Fox.	Elizabeth Rose Farley.
Edgar Drury Hardy.	Grace Isabell Farrell.
Charles Kelley.	Maud Louise Gillespie.
George Elliot Kershaw.	Florence Ethel Gray.
Richard Mack Lawton.	Mina Guyton.
Harry Gancello Leighton.	May Frances Hadley.
Wilfred Joseph Lincourt.	Gracella Judkins.
Cornelius Earle Manchester.	Alice Lund Livingston.
Harold Nickerson.	Ethel Eudora Lyman.
John Joseph Noonan.	Mattie Amanda Macdearmaid.
Justus Cutter Richardson.	Martina Frances McMahon.
James Douglas Rivet.	Mary Alice Maguire.
Edwin Melville Roberts.	Mary Alice Mather.
John Jacob Rogers.	Catherine Verecunda Miskella.
Melvin Guy Rogers.	Euretta Laura Moore.
Austin Anthony Savage.	Susan Esther Nelson.
Charles Abbott Stevens.	Winnie Dearborn Nelson.
Walter Bennett Tyrrell.	Margaret Louise Noyes.
Harold Abbott Varnum.	Catherine Gertrude O'Sullivan.
Dana Bryden Whipple.	Lillian Gertrude O'Malley.
Herbert Foster Whipple.	Minnie Emeline Parker.
Bessie Luella Adams.	Lilla Ellen Roach.
Ethel Billings.	Jessie Augusta Sargent.
Helen Estelle Bowers.	Lucy Marion Stevenson.
Mary Theresa Callahan.	Mabel Claire Walsh.
Margaret Beatrice Callahan.	Loretta Lowe Ward.
Christine Cameron.	Harriet Bancroft Whittaker.
Ella May Collins.	Gertrude Mae Wilcox.
Laura Belle Conant.	

THREE YEARS' COURSE.

Frith Ernest Atkinson.	Ella Maude Coffin.
William Dyer Bagley.	Margaret Howard Coleman.
Maurice Alton Butterfield.	Maberta Hudson Dickey.
James Francis Cassidy.	Mary Bernadette Doherty.
Frederick William Cates.	Harriet Maria Emerson.
Harry Eri Clay.	Anna Gertrude Fels.
James Aloysius Craig.	Florence White Gelino.
Joseph Leo Cronin.	Loretta Mary Gookin.
Percy Wellington Cunliffe.	Grace May Hatch.
Thomas Marshall Dix.	Mary Elizabeth James.
James Francis Gilligan.	Katrine Louise Jeannotte.
Walter Eastman Hadley.	Madeleine Elizabeth Keavy.
Almon Harmon.	Mary Louise Kelleher.
Henry William Hoole.	Fanny Gray Kendall.
Royal Clayton Hope.	Bertha May Kimball.
Albert Franklin Hutchinson.	Loreta Irene McAloon.
Thomas Garfield Ingalls.	Agnes Patricia Madigan.
Chester Snow Jennings.	Gertrude Alexia Marley.
John Edward Kearns.	Agnes Veronica O'Neill.
John Aloysius Keyes.	Flora Elizabeth Palm.
Charles Lawrence Kinsela.	Alice Ethelyn Payne.
George William Kitchen.	Kathrine Agnes Rafferty.
Charles Robert Libby.	Rena Marie Raymond.
Edward Roger Morris.	Myra Jane Reed.
Edward Augustine Murphy.	Mary Reilly.
Frederick Paul Murphy.	Edith Sarah Richardson.
Joseph Francis Nolan.	Anna Gertrude Riley.
John Michael O'Donoghue.	Raymah Alvira Robinson.
Hugh Augustine Reidy.	Anna Estelle Russell.
James Franklin Simonds.	Alice Josephine Ryan.
Albert Smith.	Mary Katharine Shanly.
Arthur Wiggin Staples.	Bertha May Sherburne.
Walter Ernest Hudson Wilson.	Anna Gertrude Thomas.
Harry Lincoln Woodman.	Lilla Magdeline Welch.
Loueva Maria Blanchard.	Ethel Augusta Whitman.
Annie Edith Boucher.	Mabel Lucretia Wilcox.
Caroline Maude Carleton.	Lillian Mae Wood.
Edith Mabel Chaplin.	

CARNEY MEDAL SCHOLARS.

John Jacob Rogers.

Robert Faulkner.

Richard Mack Lawton.

Ella Maude Coffin.

Anna Gertrude Riley.

Lucy Marion Stevenson.

MANUAL TRAINING.

Although Manual Training is simply one of the elective studies which may be taken as a part of a regular High School course, it is still new enough with us to deserve a separate paragraph as a continuation of the record made in previous reports.

During the year twenty-four Sturtevant forges, with a separate motor for power, were installed in the new forge room, and have been in constant use since September. This plant is first-class in every respect, and is giving good satisfaction. The twelve wood turning lathes previously in use not being enough to accommodate this year's class, twelve more have been added, and these have also been in use since the opening of the September term. The motor which had been sufficient for twelve not sufficing for twenty-four, a new and larger one has recently been procured. The equipment of the school is now, therefore, complete except for the metal working of the fourth year. For this plant a Hendley shaper and gooseneck belt drill have already been ordered and four or five engine lathes will be ordered early in January to be ready for use in September, 1900.

It is now expected that the High School annex will be ready for occupancy in September next, and that the manual training plant will be moved to it before that time. All machinery, motors, furnaces, etc., have been purchased and placed in the present building with a view to removal so that their transfer to the new building will not be a matter of large

expense, and in new and very commodious quarters there is no doubt that manual training will enter upon a new era of prosperity.

The number of students to elect manual training at the beginning of the school year was 45. Of these four have left the High School, and one new student has entered, making the number at present 42. Of the 39 boys who composed the next class when the record was made up in 1898, 23 are still present, the others having all left school. The third year class numbers 12, and the two who might have constituted a fourth year class have both left school, leaving the total number now taking manual training, 77.

The character of the work has been changed slightly in a way which adds much to the interest. Instead of working all the year on exercises to be destroyed at its end, an effort has been made to combine the same exercises in the construction of some useful article which students may take home. Such articles not only have value in themselves, but as samples of the best work a boy can do they prove a marvelous stimulant to good work. It is not proposed to have all the work of this character by any means, but that a part of it may be directed to the making of articles of use seems to be a plan which works well both in theory and in practice.

PRIMARY AND GRAMMAR SCHOOLS.

In 1899 the Primary Schools received 331 pupils from the Kindergartens and 2446 from other sources, and sent 970 to the Grammar Schools. Of the latter number 933 actually entered the schools of higher grade, which in their turn gave diplomas to 427 graduates, of whom 406 had certificates to the High School, and 297 actually entered the latter institution. The High School also received 24 by examination and 7 from other sources, making a total for its junior class of 328.

This is a very brief and simple record, but it stands for a great deal of hard and faithful work in which character has been formed and lives ennobled in addition to all that has been learned from books. The large number who enter the Primary School compared with the small number who carry education far enough to enter the High School is a matter of the keenest regret, though the regret is lessened somewhat by the fact that almost all who enter the Primary School do learn at least to read and write a little before they leave it.

A change of text books in history in the Grammar Schools will, it is hoped, strengthen the history work considerably. We now have Eggleston's First Book in American History in the fourth grade, Montgomery's Beginner's in the fifth, and Scudder's Short History in the sixth, as a preparation for the more formal study of history which is begun with a larger book in the seventh. Reading, as in the Primary Schools, is still by far the most important subject taught in the earlier grammar grades, and it is expected that all these books will be used as readers and not be studied as history. Some pupils will learn almost all that is in them by simply reading them; others probably will learn but little in this way, but all will be trained to read, and the reading should be so conducted as to be a treat rather than a task, with the object of inducing a love for such literature rather than the acquisition of facts of history. The books chosen are such, it is believed, as lend themselves most readily to this use. From the year's reading, too, teachers are expected to glean a few facts, not more perhaps than could be written on one page or recited in a single lesson, and to see that these are learned by every scholar with the greatest thoroughness, but even this amount of knowledge is to be held secondary to the objects first stated.

TRAINING SCHOOL.

The Training School has been enlarged during the year by the addition of one room, the extra space being gained by the removal of the Kindergarten, and now consists of nine grammar and four primary rooms, with an average attendance of 474 pupils. As the average number of pupils belonging to the primary department has been 167, the advantage of expanding its three rooms into four is obvious. The school is supervised by a principal and three assistants, and the teaching is done by members of a practice class, at a nominal salary, and by such other appointed teachers as may be needed. The expenses need not to be greater than in other primary and grammar schools of the same size.

The last class of pupil teachers to enter the Training School by examination graduated February 1, 1899, and for the next five months the school was taught wholly by regular teachers as would be the case with any other public school. The committee had decided as far back as 1897 to restrict the privilege of membership in the practice class to graduates of colleges and of the State Normal School at Lowell, as soon as the latter school should have graduated its first class. In furtherance of this plan the necessary changes in the rules were made in May, the rules as revised being as follows:—

CHAPTER V.

RULES OF THE SCHOOL COMMITTEE.

SECTION 21.—As a school for children the Training School shall consist of all the grades of the primary and grammar schools. It shall do work equivalent to that of other schools of the city of the same class, shall be subject to the same rules and shall give and receive certificates to and from other primary and grammar schools on terms of perfect equality. The teaching shall be done under the supervision of the principal by the teachers of the practice class, and

by such other teachers as the School Committee may elect or appoint.

SEC. 22. Candidates for the practice class in the Training School must be graduates of the Lowell Normal School, in the order of their rank in that school, or graduates of a college of the first class. The number to be received each year shall be such as will, in the opinion of the committee on teachers, be required to keep the primary and grammar schools of the city supplied with teachers, and it shall be the duty of the committee to report its estimate to the full board at the regular meeting in May of each year. It shall be the further duty of this committee to send to the members of the senior class in the Normal School in June of each year application blanks for admission to the Training School, and from the responses received in the same month, and from applications from those holding college diplomas, to accept the number of students needed to form the Training School practice class, to begin work in September of the same year. The basis of selection, for those applicants who have attended the Normal School, shall be wholly that of rank in that school. Accepted applicants may have their date for joining the practice class postponed for the purpose of further study or practice in teaching by vote of the committee on teachers, on request in writing before the opening of the term in September.

SEC. 23. The practice course in the Training School shall be one year, and the pay of the teachers who compose the practice class shall be \$20 a month.

SEC. 24. The principal and assistants shall rank the members of the practice class each month in scholarship, ability to impart instruction and capacity for school government, and shall keep the members constantly informed as to their standing. The principal shall keep a record of such rank and shall send a copy of the same to the secretary of the school committee each month. An unsatisfactory rank for three months shall be regarded as evidence that continued membership would be unprofitable, and the member shall be deemed to have dissolved her connection with the school. Certificates entitling the holder to teach in the primary and grammar schools of Lowell shall be given to those who satisfactorily complete the course.

SEC. 25. When a temporary or other vacancy occurs in the corps of teachers of the grammar or primary schools it shall be filled by

the member of the oldest or earliest class graduated from the Training School who, at the time of her graduation, ranked highest of those of that class, and who continues to be an applicant for a teacher's position. In case there are no graduates who continue to be applicants for teachers' positions, vacancies may be temporarily filled by the committee on teachers who may grant special certificates to meet such emergencies, subject to the action of the board at its next regular meeting.

In compliance with the foregoing rules application blanks were sent to all the members of the senior class at the Normal School, and of the thirty-two young ladies who were to graduate in the primary and grammar school department twenty applied for admission to the Training School. It had been anticipated that students holding the highest rank in the Normal School might find other cities offering them greater inducements than Lowell can do, and so might refrain from applying here, while students at the other end of the class, not being so likely to get good positions elsewhere, would be sure to knock at our doors. Such, however, did not prove to be the case. Of the graduates holding the highest rank all applied for admission to the Training School; of those holding the second rank all but one applied, while of those having the lowest ranks a majority did not apply. Of the twenty applicants the Committee decided to accept sixteen, the basis of choice being rank at the Normal School as provided by the rules. Two graduates of Wellesley College also applied, and were accepted, but of those who were accepted from the Normal School three took advantage of the clause in the rules which allows accepted applicants to postpone entrance for one year and so will not enter until next September, while one withdrew without notice, reducing the class to fourteen, all of whom have been steadily at work since the beginning of the school year.

The regular salary paid to women teachers in the primary

and grammar schools of Lowell is \$600, while every fourth primary teacher gets, as principal of a four-room building, \$650. When the cost of living and other favorable circumstances are taken into consideration it is believed that this salary is as liberal as that of any other city or town in the state, while it is much higher than that of many places. It is true that the \$200 paid here for the first year of service as member of the practice class in the Training School is less than inexperienced teachers usually get elsewhere, if they can get employment at all, but the larger salaries paid later compensate for this fact many times over if one is to make teaching a profession. Nor is the large number of teachers now in service who have not yet been elected the bugbear which it is sometimes made to appear. It is true that there are thirty-nine in this class, but every one of them has had some work in the past three months, and all but a half dozen have had absolutely steady work at \$2.25 a day since the opening of the present school year. A large proportion of them are certain of an election next March, and substitute and temporary teachers bid fair to be so scarce in 1900 that the Committee is already considering the question of increasing the size of the next practice class to meet a probable deficiency in our supply of teachers. At this writing every graduate of the Training School is at work at a salary of not less than \$2.25 a day, and for almost every one employment in 1900 and afterwards must be practically continuous.

Following are the names of graduates:—

CLASS OF FEBRUARY, 1899.

Elizabeth M. Butler.

Corinna G. Cover.

Maude M. Hardy.

Josie V. Hoar.

Delia C. Maloney.

Elizabeth A. Page.

Elsie M. Puffer.

Mary E. Snow.

KINDERGARTENS.

There has been no change in the number or character of Kindergartens during the year, and the only change of location has been that of the one at the Training School which was moved to the Charles Street Primary School in September, a transfer which has resulted in a doubling of attendance as before stated.

The work of our Kindergartens in some lines, especially in drawing and sewing, has been so noticeably superior as to attract considerable attention elsewhere. The State Supervisor of drawing chose work from Lowell schools to illustrate his idea of the possibilities of art in Kindergartens in connection with an address on this subject at the International Kindergartners' Union in Cincinnati last February, and this caused such a demand for further information as to Lowell's work, that the preparation of three manuals, one on drawing and two on sewing, was immediately begun. Two of these books are practically ready for publication, and the third will be issued toward the latter part of 1900. These books embody the results of study and investigation suggested by the Supervisor, Miss Devereaux, and worked out in practice in all the Kindergartens of the city and so are properly published under the title of Lowell Systems. The city's Kindergartens, too, have been chosen as the ones, and the only ones, to be represented in the Paris exposition next year in connection with the exhibit which is to be made of work from the State schools. Not resting on past honors, however, the Kindergarten teachers are still sparing no effort to improve themselves and their schools, and nineteen out of the twenty-four who hold permanent positions are taking three full post graduate courses this year in the State Normal School.

EVENING SCHOOLS.

In no class of schools have the changes been as great in recent years as in those held in the evening, and these changes may make a few words of history appropriate.

The first evening schools in Lowell were provided through the philanthropic efforts of individuals or associations before the time when the city had the right even if it had the wish to sustain them. In 1851 the Lowell Missionary Association, which had then maintained such schools unaided for seven years, asked and obtained from the City Council a grant of \$50 to assist in paying expenses. Similar appropriations, though for larger amounts, continued to be made until 1857, though the right to make them was questioned and the proposed payment of \$500 in 1855, was stayed by an injunction from the supreme judicial court. In 1857, however, a law was passed (sections 7 and 8, chapter 38 of the General Statutes), giving to cities and towns full power to open and maintain evening schools for the education of persons over fifteen years of age. The School Committee of that year promptly took advantage of the new law, and established as public schools two evening schools which had previously been conducted by the Rev. Horatio Wood as private schools, Mr. Wood being continued in charge. The appropriation for expenses, \$450, was too small to pay for teachers, and this need was supplied by unpaid volunteers to the number of 55, the attendance amounting to 900, and the schools being kept open two nights in the week.

This "union of charitable endeavor and city superintendence," lasted for two years, but proved satisfactory to neither party and was dissolved in 1859, Mr. Wood reopening one of the schools under the auspices of the Missionary Association and the other being abandoned. In its place the Committee opened schools in the Mann and Green School buildings, pay-

ing the men teachers one dollar and the women fifty cents per evening, and securing an attendance of 490 pupils. Each teacher cared for forty pupils on the average, a number which would now be considered far too large, but an examination at the close of the term was claimed to have shown most excellent results.

The same schools were continued with a slightly larger attendance in 1860, but were thereafter discontinued until 1869, when they were reopened, the one at the Mann being transferred to the Free Chapel on Middlesex Street, where the average attendance was 107, while the one at the Green had an average of 134. The same schools were continued in 1870 with a principal and eighteen teachers at the Green and a principal and four teachers at the Free Chapel. The schools were kept forty evenings, with an average attendance of 269, and at an expense of \$766. One or more police officers were assigned to each school to assist in preserving order. The next year the length of the school term was increased to 55 evenings, and the School Committee refer to the schools with much pride as being "a great success." In 1872 additional schools were opened in Mission School houses near Davis' corner and in Centralville. In 1874 another school was opened in the Primary School house on High Street, the term was lengthened to 64 evenings, 60 teachers were employed, and attendance increased to 595, with such improvement in deportment that the hope was expressed that the regular services of a police officer might eventually be dispensed with.

In 1883 the legislature of the state first recognized the necessity for evening schools by passing a law requiring all cities of ten thousand or more inhabitants to maintain evening schools for the instruction of persons over the day school age, which was then but twelve years. The schools which Lowell

had sustained for more than thirty years because their need had been recognized henceforth became compulsory. Whether this action of the Solons at the State House had any effect upon the action of the School Committee cannot now be told; certainly there was no necessary connection, yet it is true that the School Committee of 1883 took the greatest forward step which had ever been taken after the schools were first opened, the use of day school buildings for evening schools. Before this time all evening schools had been held in basements; halls, or ward rooms. The statement made a few lines back that an evening school was held in the Green School building did not mean at all, as it would now mean, that the comfortable seats of regular school rooms were so occupied, but only that the basement was the home of an evening school. Into such ill-lighted, utterly unventilated and unsanitary quarters a lot of long tables were placed around which pupils, sometimes numbering several hundreds, sat or stood, with a teacher at each table. This was school keeping under difficulties, surely. Each committee on evening schools, for a dozen years, had been trying to bolster up its own courage even more than trying to influence the community by saying that the schools certainly did good, that they were growing better, that they ought to be sustained, and so on, but the fact was they all knew that there was so much that was bad about them that they did not know what to do with them. To civilize the scholars the first and most necessary thing was to give them the quarters and the treatment due to civilized beings, and to better treatment pupils responded in kind, as they always do. It is not to be supposed that a change of quarters cured all ills at once; there was still much to do, but it was a great step in the right direction and the schools have been growing better ever since. In 1884-5 schools were

held in nine school buildings, and the average daily attendance, which had averaged about 500 for several years, rose to 841.

In 1885 the next great advance was made in the election of a special supervisor for the evening schools. Henceforth they were to be no longer a mere appendage to the more important day schools; they were to be a department by themselves, with a recognized head of their own. Mr. John A. Smith, the first supervisor, was admirably adapted to his work, and to him from this time on the evening schools owe more than to any other one man. In his first report he recognized and emphasized the one remaining need of the schools, last but not least by any means, the need of able, earnest and experienced teachers. Into the High School he got six college graduates and three specialists in a corps of nine teachers, and if he did not secure equal efficiency in all the elementary schools it was not his fault.

In 1887 the legislature again showed its interest in evening school education by passing a law making attendance upon such schools compulsory for all minors over 14 years of age who cannot already read and write in English. This at once brought into the schools many who though ignorant were indifferent to the advantages of education, and so largely increased the attendance, which rose in 1878 to 1,505. From this time on attendance increased every year until it reached high water mark with an average of 1912 in 1893-4. Since that time it has decreased. The hard times of the next four years prevented as many illiterates from coming to Lowell as would otherwise have sought work in our mills and so have swelled our evening schools, while of those who remained in the city nearly all had learned to read and write, a result due in very many cases to excellent work done in the very schools whose numbers showed the greatest falling off. The average

attendance in the schools this year has been 1553, the attendance being greatly decreased this winter, beyond any doubt, by the fact that many who would be glad to come are forced to work evenings in those mills which are doing night work. It seems probable, too, that an excessive number of exemptions have been given for alleged physical incapacity. No one has been exempted without a physician's certificate of disability endorsed by one of the ward physicians. When, however, exemptions of this kind had reached 188 in the first five or six weeks of the term it was decided to grant no more, and some of those already granted were withdrawn. If a person is able to work it seems fair to assume that he is able to go to school in all but a few exceptional cases, and in such cases only will exemptions be granted in the future. And if the statement here made saves a hundred or two young men and young women from paying fifty cents apiece for doctor's certificates it will at least serve one useful purpose.

A class for advanced pupils, the beginning of a High School, was opened in 1876, in the hall of the Green School house, with one teacher at \$2 per evening and 25 or 30 pupils. In 1880 it was driven from its first home by the coming of an evening drawing school to the Green School hall, and found an abiding place, which would now seem to us much more like a hiding place, on the third floor of the Worthen Street building. Its numbers had not materially increased, and one teacher still sufficed, though another was added in 1891. Two years later the school was moved to rooms in the High School building on Kirk Street, and numbers doubled at once. In 1885 the school had grown to an average attendance of 219 with nine teachers. In 1886 a course of study was made looking to a diploma at its completion, and three years later there was graduated a first class of twelve. Chemistry had

been taught for several years, but a regular course in this study was first arranged in 1889, and three students graduated in it in 1892. A class in stenography and typewriting was also represented by two graduates in a two-years' course in the same year. A business course, first arranged in 1899, is now proving very popular, having an average number belonging of 76. The school is now so well established that it can make all its courses thorough and systematic, and for students who can only command their evenings its advantages cannot, we believe, be duplicated anywhere in the city. The school now employs eighteen teachers, and has an average attendance of about 450 students. The curriculum includes arithmetic, book-keeping, penmanship, English grammar and literature, rhetoric, algebra, geometry, general history, civics, chemistry, French, German, stenography, typewriting, elocution, commercial arithmetic, commercial law, and business correspondence.

The evening schools as a whole now include eleven Elementary Schools and one High School with an average attendance of about 1,500. They are held four evenings in the week, from 7.15 to 9.15 o'clock. They give employment to 132 teachers, and cost for the term of 1898-9, \$13,477 for salaries of teachers and janitors, a sum less by \$4,738 than three years ago. In the Elementary Schools a majority of those who attend are simply learning to read, write and spell, and to do some such work in numbers as is required in the life of all citizens. The schools, however, all have advanced rooms where grammar, composition, history, geography, advanced arithmetic, etc., are taught. They are graded as far as possible, and graduate classes for the evening High School each year. The number of pupils to the teacher averages about fifteen, an average of less than twelve in any one school being followed by a reduction of the teaching force. Nearly

all the teachers have had long experience in the work, are well qualified for it, and should be retained as long as they are willing to serve. Such qualifications are required of evening school teachers (those who are not graduates of a High School being required to pass an examination to get a sixth grade certificate) as to bar out those of very deficient scholarship, but among those who manage to get certificates there is still a very wide difference in ability and zeal, and the opportunity to greatly serve the schools and their pupils by the exercise of a wise discretion in appointments is very great. In the High School none but college graduates should be appointed unless under very exceptional circumstances.

Following are the records of attendance, etc., in the evening schools for the last completed term, with names of the graduates of the High School:—

SUMMARY OF ATTENDANCE.

For the Term 1898-99.

SCHOOLS.	Teachers and Principals at Opening of Term.	Teachers and Principals at Close of Term.	Whole Number on Time Books.			Average Number Belonging.			Average Attendance.			Per Cent of Attendance.
			Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
High	19	18	413	391	804	229	214	443	233	199	432	82
Aiken Ave.....	7	6	95	47	142	53	34	87	46	33	79	90
Bartlett.	17	16	....	264	264	...	227	227	....	190	190	95
Butler.....	5	4	143	19	162	53	14	67	12	37	49	73
Colburn.....	8	7	144	54	198	41	27	68	41	22	63	80
Edson	7	6	124	57	181	45	32	77	40	28	68	88
Franklin	10	9	123	70	193	66	50	116	53	44	97	83
Green	22	18	588	....	588	299	....	299	268	...	268	90
Mann.....	17	15	340	....	340	187	....	187	167	....	167	87
Man'l Training..	4	4	70	35	105	40	17	57	35	15	50	73
Pawtucket.....	2	1	62	12	74	23	6	29	16	6	22	66
Varnum.....	6	5	80	58	138	35	31	66	35	33	68	96
Totals.	124	109	2182	1007	3189	1071	652	1723	946	607	1553	85

GRADUATES, CLASS OF 1899.

REGULAR THREE YEARS' COURSE.

Robert Barlow.	William Hunt Greenleaf.
Joseph Berthiaume.	Mabel Lorena Hersom.
Annie Jane Burke.	Lillie Hobbs.
John Chalmers.	Mary Jane Inglis.
Ernest W. Chippendale.	Charles Henry Kershaw.
John Joseph Coyne.	Delia Marguerite Kirrane.
Alice Veracunda Devine.	Edward Thomas Lee.
Margaret Elizabeth Eagan.	Thomas Leonard Livingston McAfee.
Arthur Ernest Ellis.	Jane Catherine McKinley.
Reginald Frank Evison.	John Cornelius O'Hare.
William Alfred Evison.	John Joseph Owens.
Mary Franc�s Fa�vey.	Frederick Paul Rogers.
Mary Priscilla Finnegan.	Peter Syriac Roy.
Anastasia Eugenia Folsom.	Agnes Veronica Sherry.
Patrick Joseph Fleming.	Edward J. Webster.
Mary Thresa Gallagher.	Thomas Woodcock.
John Joseph Glynn.	William Alexander Webb.

STENOGRAPHY AND TYPEWRITING.

TWO YEARS' COURSE.

Amelia Bennett.	Thomas Joseph Fitzgerald.
Carrie Maud Eunice Black.	Edith Lefevre.
Mary Jane Breen.	Jennie Turnbull McLauchlan.
Lilla Leonard Corliss.	William Joseph Marshall.
Elizabeth Mary Graham.	Annie Pauline Paulson.]
Gertrude Louise Judd.	John George Popplewell.
Harriet Jane Keefe.	George Senior.
Maurice Roche.	Elizabeth May Thatcher.

CHEMISTRY.

THREE YEARS' COURSE.

Arthur Lincoln Baldwin.	William Crosby Kendall.
John Balloch.	Frederick Francis Meloy.
Thomas Henry Donohue.	Frank Rawnsley.
Albert Edward Downing.	Robert Reid Sleeper.

FREE EVENING DRAWING SCHOOL.

The Evening Drawing School began its fall term this year with a larger attendance in its machine class than ever before. About 200 applications for admission to this class were received, but accommodations could only be found for 175, though additional tables were put in until the last inch of space had been utilized. One new teacher has been employed, and the time heretofore devoted to record keeping by the principal has been saved to him by the employment of a clerk at a dollar an evening. The other classes are well filled, and the usual good work is being done.

This school was represented in a State exhibit of drawing in Boston in October, and its display of art work was universally admired, being in some respects at least unsurpassed by anything of the kind in the whole exhibit.

Attendance for the term of 1898-9 is shown in the following table :—

EVENING DRAWING SCHOOL.

For the Term 1898-99.

CLASS.	Number of Teachers at Close of Term.	Whole Number on Time Books.			Average Number Belonging.			Average Attendance.			Per Cent of Attendance.
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
Architectural	4	90	1	91	65	1	66	49	1	50	76
Machine.....	5	112	....	112	95	....	95	72	....	72	64
Free-hand	5	92	56	148	44	36	80	35	29	64	80
Modeling.....	4	79	36	115	34	19	53	31	16	47	89
Practical Design.....	2	14	14	28	9	7	16	7	6	13	81
Totals	20	387	107	494	247	63	310	194	52	246	78

SCHOOL ATTENDANCE AND TRUANCY.

So far as I can judge truants and scholars absent from school under suspicious circumstances have never been looked after more promptly and more effectively than in the past year. Supplies, too, have been promptly delivered in almost all cases and the whole work of the Truant Department has been very satisfactory. Not all absentees have been dealt with as effectively as teachers could wish, it is true, but there are often home reasons for clemency which would have to be seen to be appreciated. Forty truants have been sent to the Truant School, a larger number than has been so cared for by any other city in the State except Boston, though less, undoubtedly, than the number who have deserved to go, or who would have been benefitted by going. The work of the officers is given in detail in a statistical table which follows this report.

The County Truant School at North Chelmsford still continues to win approbation as a model institution of its kind. Not all who are sent there are permanently reformed, it is true, but all who stay there have been for a time under the best influence, and if they remain untouched the fault is not that of the school.

In conclusion I wish to express in more than a formal way my high appreciation of the work of the teachers of the city, and my gratitude to them and to all who have been associated with me in the work of the schools for kindly consideration and efficient assistance. To every member of the School Committee, too, I owe hearty thanks for generous confidence and loyal support.

Respectfully submitted,

A. K. WHITCOMB,

Superintendent of Schools.

COURSES OF STUDY.

TIME TABLE

In minutes, per week, for the

PRIMARY AND GRAMMAR SCHOOLS.

	1st Year.	2d Year.	3d Year.	4th Year.	5th Year.	6th Year.	7th Year.	8th Year.	9th Year.
Reading.....	755	570	520	300	220	180	160	150	150
Arithmetic.....	150	210	240	250	280	280	280	280	180
Algebra.....	....	....	....	....	....	....	....	....	120
Grammar.....	....	....	....	....	....	120	130	150	170
Comp. and Lang.....	....	75	75	150	150	100	100	100	100
Geography.....	...	20	30	180	180	180	170	150	150
History.....	20	20	30	40	60	60	140	150	150
Spelling.....	60	90	90	100	100	100	100	100	90
Writing.....	60	60	60	60	60	60	60	60	60
Drawing.....	60	60	60	60	60	60	60	60	60
Music.....	60	60	60	60	60	60	60	60	60
Nature Study.....	30	30	30	60	60	30	30	30	30
Physiology.....	25	25	25	....	30	30	30	30	....
Sewing.....	....	....	....	60	60	60	....	....	....
*Manners, Morals.....	25	25	25	25	25	25	25	25	25
Physical Culture.....	30	30	30	30	30	30	30	30	30
†Recesses.....	200	200	200	100	100	100	100	100	100
†Opening Exercises.....	25	25	25	25	25	25	25	25	25
Totals.....	1500	1500	1500	1500	1500	1500	1500	1500	1500

*Required by State Law; time fixed at five minutes each day by vote of the School Committee.

†See Sec. 22, Chap. III, of the Rules of the School Committee.

†See Sec. 23, Chap. III, of the Rules. If for any reason a recess is shortened or omitted the time for the same should be given to physical exercises, and the hours for closing school prescribed by the School Committee should not be changed.

Book-keeping may receive one-half the time assigned to penmanship in the ninth year.

Physics, optional, in the ninth year, may occupy 60 minutes per week, to be taken equally from physical culture and grammar.

The above table is intended as an approximate estimate of the relative importance of the different studies, and teachers are at liberty to vary the time for each study within such reasonable limits as circumstances may require.

FIRST YEAR.

FIRST HALF

READING.—Teach by the sentence and word method, beginning with script letters on the blackboard, and later using the Monroe, Burt or Appleton Chart and the first lessons in the First Reader. As soon as a few words are learned use phonic analysis to secure distinct articulation and assist in the recognition of new words. Consult on the subject of phonetics Ward's "Manual of Instruction for the Rational Method in Reading," and the Connecticut school document entitled "Phonetics in Teaching Reading."

WRITING.—Short sentences from blackboard copy.

LANGUAGE.—Object: (1) To secure the confidence of the children and make them feel at home in school; (2) to increase their vocabulary; and (3) to accustom them to express their thoughts in simple and correct forms of speech.

Lead the children to talk freely about things with which they are familiar, and to reproduce short stories told them by the teacher. Require complete statements, correct forms of speech and distinct articulation, using great care, however, that corrections are not made in a way to repel confidence or lessen interest. The importance of making children enjoy the first weeks of school life cannot be overestimated. Memory gems, brief maxims, and short selections of poetry, should be learned and recited in this and all succeeding grades. History and literature in the form of short stories told by the teacher and reproduced orally by the children should have some place from the first, care being taken to have such stories very simple as well as short. The very excellent courses of study prepared by Dr. Edmund, principal of the Training School, on "Oral

and Written Language," on "Reading and Literature," and on "History" contain many valuable suggestions and directions in the line of the work desired, for which space is lacking in this very brief outline. These courses can be had at the office of the Superintendent of Schools, and should be in the hands of every teacher of the primary and grammar schools.

ARITHMETIC.—Numbers from one to five, inclusive. Add, multiply, subtract, and divide, developing all processes by the aid of objects. Consult Wentworth and Reed's "First Steps in Number," Baldwin's "Industrial Arithmetic," and Speer's "Primary Arithmetic" in this and succeeding grades.

NATURE STUDY.—Lessons to recognize and name a few common plants, animals and minerals, and to note single qualities of each. Teach only from observation and experiment. The "Outline Course" prepared by the N. E. Conference of Educational Workers will be supplied to each school, and may be used as a manual. Consult also Miss Newell's "Lessons in Botany." Cooke's "Nature Myths" and Lovejoy's "Nature in Verse" are recommended for reading in this and succeeding grades.

PHYSIOLOGY.—Oral lessons, teaching the names and uses of the external parts of the body, and the simplest rules of health. Consult Prince's "Courses and Methods," pages 173 and 195. The order of topics prepared by Dr. Dunton of the Boston Normal School, and printed on page 196 of the above mentioned book, may profitably be followed in this and all succeeding grades. Teach the effect of the use of alcoholic stimulants and narcotics as required by the laws of the State.

MANNERS AND MORALS.—As required by the Public Statutes of the Commonwealth and printed on page 30 of the Rules

of the School Committee, in this and all succeeding grades. Mrs. Dewey's "How to Teach Manners," or Miss Wiggin's "Lessons on Manners," may serve as a manual.

MUSIC AND DRAWING.—Throughout the course as directed by the special teacher of each of these branches.

SECOND HALF.

READING.—Franklin First Reader and supplementary readers. Continue phonics with much drill on phonograms and their blending into words. See that every phrase is spoken as a whole. In this, as in all grades, the aim is to secure a full comprehension of the thought, natural expression, distinct articulation, correct pronunciation, and ready utterance.

If the last part of the First reader proves too difficult for the first year leave a part to be finished the second year.

WRITING.—Sentences from the blackboard, chart, and slips prepared for the purpose. The teaching of spelling will be included in the same exercise. See Ward's manual, page 29. If all the letters of the alphabet have not been learned by the pupil by the end of the year, unconsciously, give a little special instruction to accomplish this object.

LANGUAGE.—Objects: to increase the pupils' stock of ideas and words, and to facilitate the expression of thought in correct forms of speech.

Conversational lessons as in the first half, carefully correcting all errors of expression. In this respect every lesson in this and all succeeding grades should be a language lesson. History and literature continued. Whenever possible make stories more interesting by showing pictures. Begin writing short sentences, and teach the capital at the beginning of the sentence, the capital I, and the period and interrogation mark.

ARITHMETIC.—Numbers, oral and written, to ten, inclusive. Use objects, but discard them gradually as facts are learned, and give much drill in applied and abstract work. Arabic and Roman notation to ten (and further, so as to enable pupil to tell page, lesson and paragraph in the reading book, at the option of the teacher.) Teach and use the signs $+$, $-$, $\times$, $\div$, $=$, and have their use begun by pupils. Teach, objectively, the fractions $\frac{1}{2}$, $\frac{1}{4}$; coins from one cent to ten cents; pint, quart, inch.

NATURE STUDY.—Lessons as in the first half. Teach only the most general and obvious features, and assist pupils to find out all facts for themselves as far as possible.

PHYSIOLOGY.—As in the first half. In connection with names and uses, teach the proper care of the hair, teeth, nails, etc. Do not try to teach too much; only general facts which are within the range of the pupils' observation are wanted. Show importance of cleanliness, exercise, proper clothing, good food, pure air, etc., in this and succeeding grades.

SECOND YEAR

FIRST HALF.

READING.—The first half of the Franklin Second Reader, and supplementary readers, with phonetic drill as before. The ideal in this and all succeeding grades of the primary course is to have thoughts given as wholes with no hesitating over or at the separate words. To enable pupils to do this all new and difficult words should be pronounced and their meaning explained before oral reading is begun. Then, by questioning, make sure that the pupil fully understands what he has seen in print, and allow him to read, orally, only when

he is ready to do so without halt or break. Make haste slowly, and give pupils much easy reading, rather than a little which is difficult.

WRITING.—Sentences and words as in the first year, and from dictation. Use capitals, the period and the question mark. As before the same exercise should teach spelling. Oral spelling may also be begun at the option of the teacher. Teach children to spell their own names and the names of places or objects in which they are interested.

LANGUAGE —Teach the use of good English by illustration in readings and story telling, using for this purpose selections simple enough to be suited to the children and yet such as are in good literary form, and give practice in very simple reproductions, both oral and written. Have children copy sentences, bits of poetry, etc., and memorize appropriate selections. In written exercises teach the use of such marks of punctuation as their composition requires, and of such capital letters and abbreviations as are needed. The literature best adapted to this grade is that of fairy tales and folk lore stories, and the history is that of mythology and legend. Local history should receive a prominent place, and such stories as those of Columbus, the Pilgrims, Washington, etc., would be appropriate. Suit history to holidays as "The First Thanksgiving," to November, etc.

ARITHMETIC.—Numbers, oral and written, in separations and combinations, to twenty. Objects may be used if necessary, but ought not to be greatly needed. Simple operations in small fractions and in denominate numbers also continued. Teach pupils to read the signs $+$, $-$, etc., and to use them as well as know their meaning.

GEOGRAPHY.—Teach cardinal directions, applying the terms north, south, etc., to all objects near enough to the school-house to be within range of the child's observation or knowledge, and give easy oral lessons at appropriate times on natural objects and phenomena, as sun, clouds, rain, etc. Note temperature as warm, hot or cold, and the weather as sunny, cloudy or rainy. Consult Forye's Primary Geography in this and all other primary grades.

NATURE STUDY.—Work of the first year continued and extended. Of plants name parts, as stem, leaf, bud, etc. Name parts and note habits of animals, birds, insects, etc. Remember that no lesson is worth giving which does not thoroughly interest the pupil at the time, and tend to increase his regard for the natural objects which are all about him. Have pupils draw and describe, orally and in writing. Wood's "First Natural History Reader," and Wright's "Seaside and Wayside, No. 1" are provided as supplementary reading in this and succeeding grades.

PHYSIOLOGY.—The senses: the eye and sight; the ear and hearing. Teach only the most general features, any thorough study of the anatomy of the eye or ear being wholly out of place. Teach by observation and experiment as far as possible. Temperance teaching as before.

SECOND HALF.

READING.—Franklin Second Reader completed. Phonic drill continued and emphasized. If pupils cannot easily complete the Second Reader, omit the last part, and substitute easy reading from supplementary readers.

WRITING.—On paper, from blackboard copy, from dictation, and from print as found in the reading book.

SPELLING.—Words of the reading lesson copied by pupils either from the book or from the teacher's blackboard writing, and afterwards written from dictation, or spelled orally, or both. Teach the spelling also of terms used in other studies, and of objects like articles of food or clothing with which children are familiar.

LANGUAGE.—As in the first half. Oral and written exercises. Continue to give attention to capitals and the most common marks of punctuation. History and literature as in the first half.

ARITHMETIC.—Numbers, oral and written, to fifty, with drill as in the first half. Give much practice in oral examples, with abstract numbers involving several operations, for rapid work. Roman notation to fifty. Coins and dollar sign; pint, quart, gallon; pint, quart, peck, bushel; inch, foot, yard; hour, day, week, month, year; dozen. Fractions, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{3}$, $\frac{1}{6}$.

GEOGRAPHY.—Continue work of first half, and begin the work of recognizing and naming bodies of land and water which are within the range of the pupils' observation, as hill, valley, river, brook, etc. Field lessons are strongly recommended. With growing plants in the school-room, teach effects of too great heat or cold, lack of moisture, etc.

NATURE STUDY.—As in the first half. Experiment with seeds planted in pots in the school-room. Have children gather cocoons, and watch for the change into moths and butterflies. Make regard for animal life an integral part of all lessons on animals. Observe, draw, describe.

PHYSIOLOGY.—The senses continued; the nose and smell; the tongue and taste; touch. Show the use and value of all

the senses, and the ill effects of abuse, including under the latter topic the effects of alcohol and tobacco. Be careful not to lessen influence by over-statements.

THIRD YEAR.

FIRST HALF.

READING.—The first half of the Franklin Advanced Second Reader, and supplementary readers. The habit of reproducing that which has been read, usually orally, but sometimes in writing, which should have already been begun, becomes in this and succeeding grades a matter of the greatest importance, and every reading lesson should have in connection with it some work of this kind.

WRITING.—On paper with pen or pencil, and in the writing book with pen. In all written work in language, nature study, etc., insist on order, neatness, and the very best penmanship of which the pupil is capable.

SPELLING.—Words and sentences copied from the reading book, and afterwards written from dictation. New words in the reading lessons spelled orally, and afterwards written in sentences. Be sure that no pupil is called upon to spell a word the meaning of which is not known. Insist upon correct spelling in all written work. Give much drill on familiar words which are often misspelled, but do not consider it necessary to teach the spelling of all the difficult and uncommon words which are found in the reading book.

LANGUAGE.—Oral and written exercises. Review, continue, and extend all work of previous grades. Teach different forms of sentences, the use of is, are; was, were; did, done; saw,

seen, etc.; the correct use in sentences of some synonyms, as big, large; like, love, etc.; and a few homonyms, as fore, four; write, right; no, know, etc.; the use of capitals with proper names, some abbreviations and such punctuation as is needed in the written work done by the pupils.

The work in history and literature may be extended somewhat, both in use and in subjects. A little written reproduction may be added to the oral, and stories for literary culture may include myths, fables and folk lore such as are given by Hawthorne in his "Wonder Book," or Scudder in his collection of folk lore tales. In myths, choose those of natural objects as "Ulysses and the Bag of Winds," etc. History may include more stories of noted men and events. The history of Lowell is worthy of much attention, especially the story of its founding. Note use of Indian names as Wamesit, Merrimack, Pawtucket, etc. Use pictures when possible.

ARITHMETIC.—Numbers, oral and written, Arabic and Roman notation, to one hundred. Drill as before on rapid, applied, and abstract work, and give much attention to adding numbers in columns, and to the multiplication table. Review and extend all previous work, especially that in fractions and denominate numbers. To fractions previously studied add twelfths.

GEOGRAPHY.—Teach as many land and water surfaces as can be brought within the range of observation (names, not definitions), and, by the aid of pictures, begin to develop some knowledge of objects beyond vision. Field lessons and sand modeling, if possible. Consult Frye's "Brooks and Brook Basins," and "Child in Nature."

NATURE STUDY.—Observation lessons on familiar plants, animals, and minerals continued, to include some knowledge of

parts, habits, uses, qualities, etc., with comparisons noting resemblances and differences. In the study of minerals consult Crosby's "Common Minerals and Rocks" and Richards' "First Lessons in Minerals." Read in this year, "Wood's Second Natural History Reader" and "Seaside and Wayside, No. 2." Consult Ricks' "Natural History Lessons."

PHYSIOLOGY.—The bones, teeth, skin and muscles. Teach few names, and only the most general features, giving special attention to the laws of health. Temperance teaching continued.

SECOND HALF.

READING.—Franklin Advanced Second Reader completed, and supplementary readers. Continue phonics and enunciation exercises.

WRITING.—Copy book No. 2, with pen, and paper with pen or pencil, as before.

SPELLING.—As in the first half.

LANGUAGE.—Results to be accomplished: At the end of this year pupils should be able to reproduce the thoughts of others, whether read silently by themselves or told them by the teacher, and to express their own thoughts on any subject clearly within the limits of their own knowledge in fairly correct and appropriate forms of speech. They should have some knowledge of the simplest form of letter-writing, and should know the usual marks of punctuation, the common abbreviations, and the proper use of capital letters.

The work to be done is best indicated by the above statement. Consult Tarbell's "Lessons in Language," of which Part I will be the work for pupils in the first half of the fourth year.

ARITHMETIC.—Numbers to one hundred and forty-four. Arabic and Roman notation to one thousand. Review and extend the work of all previous grades. To be ready for promotion to a grammar school, children should be able to add columns of figures to a total of 100 rapidly and accurately; to know the multiplication table to twelve times twelve; to use all the common tables of denominate numbers in simple reductions; to find fractional parts of all numbers less than 144 which are multiples of the denominators of fractions to and including twelfths; and to add, subtract, multiply, and divide small fractions, like $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{8}$.

GEOGRAPHY.—Continue work of first half and review and extend work of all previous grades. Teach by observation as far as possible, and then, by the use of pictures, as many bodies of land and water as is possible. Observe, draw, model, and describe.

NATURE STUDY.—Lessons as in the first half.

PHYSIOLOGY.—Circulation, respiration and digestion. As before, avoid teaching too much, and make the instruction as practical as possible by relating each fact learned to some simple and easily followed law of health.

GRAMMAR SCHOOLS.

FOURTH YEAR.

READING.—Franklin Third Reader and supplementary reading of the same grade. For reading to pupils it is hoped that teachers will obtain from the city library and elsewhere many books from which to get selections not to be found in regular text books. Correlate history and geography with reading by

the use of stories of heroes either real or mythological, and by accounts of strange countries and unique productions.

SPELLING.—Words in common use, orally and in writing. By definition, or use in sentences, make sure that pupils understand the meaning of all words given for a lesson. Make every written exercise a lesson in spelling. Select words for practice from all text books used, and for supplementary drill use Worcester's New Pronouncing Speller: First half to page 29; second half to page 47.

ARITHMETIC.—Numbers to 1000. Daily oral drill in numbers to 100, as in the primary schools. Written work, with numbers expressed by not more than three figures, in addition, subtraction, multiplication and division, no multiplier or divisor to be larger than 9. Use terms, sum, product, multiplier, etc., but do not require definitions. Give problems in dollars and cents, using the dollar sign and decimal point. Continue the drill of the primary school in easy reductions of denominate numbers. Teach thoroughly the reduction, addition, subtraction, multiplication and division of the fractions, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{9}$, $\frac{1}{12}$, illustrating all processes by objects, but using the written expression from the first. Second half, continue and extend all work of the first half. Notation and numeration to 1,000,000. Multiplication with multipliers large enough to be expressed by two or three figures, and long division, no divisor larger than 25. Decimals to thousandths in addition and subtraction, and in multiplicands and dividends in multiplication and division.

LANGUAGE.—Teach the sentence as the unit of thought, its four kinds, and its division into subject and predicate. Have much oral work and give such written exercises as shall review and extend knowledge of the proper use of capitals, punctuation marks, and abbreviations. Tarbell's and De Garmo's

first books on language should be consulted for suggestions much fuller than can be given here. Continue the story telling and readings of the previous grades, and extend the amount and range of selections for memorizing. Continue letter writing both original and from dictation, using, however, in this grade, only the simplest forms. Second half, continue work of the first half, and for new work teach the use of the plurals and possessives of nouns.

GEOGRAPHY.—The earth as a whole, with land and water forms; the air, winds, dew, rain, snow, etc. Teach by observation as far as possible, relating that which is beyond vision to that which has been observed as far as can be done, and using pictures to still further assist the imagination. Second half, the use of globes and maps and a brief general study of the hemispheres and their grand divisions, North America, the United States as a whole, and the New England and Middle States more in detail.

HISTORY.—As many stories should be read by the pupils, or told or read to them by the teacher, as time will permit, but the number of facts to be required for reproduction should be very few, probably not more than could be written on a page of foolscap, or told by a class in the time of a single recitation. These few, however, should be learned with the utmost exactness and thoroughness; they should be planned to form the basis of all future study of the history of the United States from Columbus to McKinley; should include a few dates like 1492, 1776, etc.,—a half dozen will do very well, but these few should be so learned as to be recalled as automatically as the child would recall his own name. In the recitation of facts intended to be mastered no mistakes should be tolerated; nine-tenths of the teaching, however, should not have

the memorizing of facts, names and dates as any part of its object, but should aim to quicken interest, broaden vision, stimulate patriotism and develop character through appreciation of courage, loyalty and virtue as exemplified in the heroes of history. Use pictures, relics, etc., to increase interest as far as possible, and remember that whatever else is accomplished the lesson is a failure which does not leave the class with a desire for further study.

NATURE STUDY.—Continued study of plant life, emphasizing the changes from flower to fruit and seed; continued study of animals for recognition, habits, and adaptation of parts; second half, more detailed study of the plant and its parts, with conditions of germination and growth, such as need of air, light, warmth, moisture and proper soil; pebbles, sand and clay with reference to life history of rocks.

Writing, Drawing and Music as directed by the supervisors of these branches in this and succeeding grades. Sewing under direction of the special teacher in this and the next two grades.

FIFTH YEAR.

READING.—Franklin Fourth Reader, and Supplementary Books. For suggestions see Miss Edmund's course for this year.

SPELLING.—As in the fourth year, with words for supplementary drill. First half to page 69 in the authorized text book; second half to page 93.

ARITHMETIC.—Continue all the work of the previous year. Whatever else is omitted see that oral drill and rapid written work with small numbers are given prominent places on the programme. In written work give many examples and problems

with small numbers, rather than a few with large numbers. Long division with divisors of not more than three figures. In addition to constant practice with fractions already learned, teach $\frac{1}{5}$, $\frac{1}{10}$, and continue practice in the use of decimals and denominate numbers. In the use of the authorized text book omit all the examples involving long and tedious operations with large numbers; second half, continue work of the first half. Teach fractions to and including twenty-fourths. Teach least common multiple when needed as a means of finding the least common denominator of fractions, and factoring and cancellation when needed for practical use. Extend work of previous years in denominate numbers to include all simple reductions.

LANGUAGE.—Dictation, reproduction, description, narration work and letter writing continued. For new work teach the use of adjectives, with their comparisons, and pronouns. Second half continue work of first half with careful attention to the use of punctuation marks, capitals, etc., and complete the study of the use of the parts of speech not already learned as outlined in Tarbell's Lessons from page 156 to the end of the book.

GEOGRAPHY.—Complete the study of the groups of states which compose the United States, and of South America. Second half, teach of Europe, Asia, Africa and Oceania, making the work simple, general and elementary, as would be suggested by the authorized text books.

HISTORY.—First ascertain exactly what facts were taught in the fourth year, and review the same so thoroughly and constantly that no one of them shall escape. Second, add about as many new facts, dates, etc., as were mastered in the last year, and teach them with the same thoroughness and intensity as was then demanded. Cover the whole period of the history

of civilized man in America, selecting the new matter of this year so as to fill out and supplement the exceedingly brief outline of the previous year, and relate our history to that of the world's whole past as far as such relation is natural and helpful. In teaching a few, a very few, indispensable things be satisfied with nothing less than perfection, and for the rest and by far the most of the time have pupils read and enjoy the stories which are the life of history without attempting to burden them with the recollection of all they read. Correlate with geography, make and use maps, draw, use pictures, make collections, etc., etc.

NATURE STUDY.—Study of trees, for recognition by differences in size, form, leaves, bark, etc.; study of one insect, as grasshopper, butterfly or moth, as type; gather cocoons and note metamorphosis. Second half, study of plants and their growth continued, emphasizing roots and stems; of rock-forming minerals, as quartz, mica, feldspar, hornblende, etc. Note use as building stones.

PHYSIOLOGY.—Book No. 1 of the Union Series as a reader, with such comment and instruction in this and succeeding grades as shall comply with the following law of this State: "Physiology and hygiene, which shall include special instruction as to the effects of alcoholic drinks, stimulants and narcotics on the human system shall be taught as a regular branch of study to all pupils in schools supported by public money."

SIXTH YEAR.

READING.—Franklin Intermediate and supplementary books.

SPELLING.—As before, correlate spelling with every subject taught. Make every written exercise a lesson in spelling, and

for supplementary drill use the authorized text book; first half, to page 111; second half, to page 125.

ARITHMETIC.—Continue oral drill and rapid written work with small numbers. Review and extend work in fractions but do not attempt to master the too difficult problems of the text book. Teach decimals more fully than before, and give many problems involving the use of United States money and the reduction of denominate numbers. Second half, continue all work of first half. Practice in compound numbers should include all common reductions, but should omit the addition, subtraction (with the exception of the subtraction of dates), multiplication and division of compound numbers as such, longitude and time, metric equivalents, etc.

LANGUAGE AND GRAMMAR.—First half, (*a*) Language:—A careful review of the work of previous years, as suggested by the first 14 pages of the authorized text book. Suggest and, as far as possible, provide abundance of good selections of both poetry and prose for pupils' reading in this and all higher grades. Draw liberally on the Public Library. See that at least one brief selection or memory gem is memorized each month.

(*b*) Grammar.—(1) The analytic study of the sentence, subject and predicate, essential and complete; (2) the classification of words *according to their use in sentences*, to include nouns and pronouns. (Scouthworth and Goddard, pp. 77-98).

Second half, (*a*) Language.—Review and extend the knowledge and practice of letter writing, including the heading, address, salutation, body, complimentary ending, signature and superscription, as suggested in the text book, pages 14 to 36.

(*b*) Grammar.—The classification of words continued to include all the parts of speech not already studied (pp. 98-126).

GEOGRAPHY.—Mathematical, physical and political. Geography of the earth as a whole, with a general study of the hemispheres, as outlined in the first 26 pages of Butler's Complete Geography. Second half, North America, the United States as a whole, and the New England and Middle States in detail.

HISTORY.—Treat the work of the fourth and fifth years in history exactly as the teacher of fifth year was instructed to treat that of the year preceding her own, and make a few additions in accordance with the plan and in the spirit heretofore suggested.

NATURE STUDY.—Study of trees continued. In spring emphasize clusters of flowers, maple, elm, horse chestnut, etc., and in fall tree fruits and the dispersion of seeds. Study of birds, grouping according to habits; e. g. aerial—perchers; terrestrial—scratchers; aquatic—swimmers, and the adaptation of parts to these habits.

PHYSIOLOGY.—Book No. 2 of the Union Series as a reading book, with comment and instruction as before.

SEVENTH YEAR.

READING.—Franklin Intermediate and supplementary readers.

SPELLING.—Work of the sixth year continued. For supplementary drill use the text book: First half to page 135; second half to page 145.

ARITHMETIC.—Review constantly the work of all preceding years, but especially the work in fractions and denominate numbers. For advance work take up percentage, with applications to profit and loss, insurance, brokerage, taxes, etc.

Second half, to work of first half add interest, simple and compound, with applications to promissory notes and discounts at banks.

LANGUAGE AND GRAMMAR.—First half, (*a*) Language :—To the letter writing, dictation and reproduction exercises of the previous year add narrative writing, with careful attention to capitals, punctuation and paragraphing as before.

(*b*) Grammar.—Sentence building; the base of a sentence, with modifiers; sentence analysis (pp. 126-156.)

Second half, (*a*) Language.—The work of the first half continued and extended. It is of far more importance to any pupil that he should be able to write a properly arranged and well-worded letter or express himself tersely and clearly in orderly narration than that he should know much of technical grammar, and excellence in the latter should never be sought at the expense of the former.

(*b*) Grammar.—Structure of sentences continued, reviewing and extending work of past years. Begin the classification of the parts of speech according to *kind, form and use*; nouns (pp. 156-183)

GEOGRAPHY.—Atlantic, Gulf and Central States; second half, Rocky Mountain and Pacific States and Territories, British America, Mexico, the Central American Republic and other States, and West Indies.

HISTORY.—Discovery, exploration and conquest of America to date of first permanent English settlement in greater detail than before, but with constant use of the outline already learned, using the order of the authorized text books. Relate the history of this country as fully as possible to the European, and

especially to the English history which preceded it. Second half, the settlement of North America to the beginning of the French and Indian war.

NATURE STUDY.—Grains and grasses in the fall; rose family in spring. For animal study specialize on some typical family, as e. g. for marine animals, the oyster or clam, the lobster or crab. Compare with vertebrates (fish). For work in minerals, the study of some common metals and their ores, as iron, copper, etc.

PHYSIOLOGY.—First half, food and digestion; second half, the blood, blood vessels and circulation. General facts relating to laws of health are to be emphasized rather than minor details of structure. Teach origin and effects of the use of alcohol as required by law.

EIGHTH YEAR.

READING.—New Fifth Reader and supplementary books.

SPELLING.—Relate spelling to all other subjects taught as in previous years and use the authorized text book for additional drill. First half to page 155; second half to page 163.

ARITHMETIC.—Review the work of all previous years, with further applications of the principles of percentage and interest to stocks and bonds, exchange, etc., and add partnership, ratio and proportion. Of subjects treated in the authorized text book omit equation of payments, problems in exchange involving interest bearing drafts, and the more complicated problems in partnership. Second half, involution, evolution, to include second and third roots, and mensuration of plane surfaces to and including circles.

LANGUAGE AND GRAMMAR.—First half, (a) Language—Letter writing, reproduction exercises and narrative writing continued, with careful attention to capitals, punctuation and paragraphing as before. Relate language to all subjects studied by giving the preference in the choice of topics to those which are suggested by the study of history, geography, etc.

(b) Grammar.—(1) Analysis and synthesis of sentences continued; (2) Classification of words as to kinds, forms and uses continued, to include pronouns and adjectives. (pp. 183-219.)

Second half, (a) Language:—To exercises previously suggested add descriptive writing with subjects chosen as in the first half. Do not forget the direction given at the beginning of the course that at least one selection each month should be carefully memorized by every pupil.

(b) Grammar:—To a constant review of the work of all past years add the study of verbs as to kinds, forms, uses, etc. (pp. 219-263.)

GEOGRAPHY.—South America and Europe. Second half, Asia, Africa, Oceania, with a general study of the principal commercial routes of the world, and of the chief exports of leading commercial ports.

HISTORY.—The conquest of Canada, and the development of the English colonies in America into the United States to the time of the Treaty of Paris in 1783. Second half, the establishment, growth and history of the Union under the Constitution to the administration of Andrew Jackson, 1829.

PHYSIOLOGY.—The study of the human body as outlined in the authorized text book, Union Series, Book 3, to include the respiratory system, the bones, joints and muscles. Second half, study of the subject as outlined in the text book completed.

NATURE STUDY.—Birds, from observation, for recognition. knowledge of the time of arrival and departure of those which are migratory, habits, food, nesting, etc. Pupils ought at the end of the year to know from personal observation a dozen kinds. (Several pupils saw and learned to recognize 80 or more varieties in Lowell and its immediate vicinity last year.)

NINTH YEAR.

READING.—New Fifth Reader, Masterpieces of American Literature, and other supplementary books. Read and study as literature Irving's Rip Van Winkle and Longfellow's Evangeline in the first half year, and Whittier's Snow Bound, Hawthorne's Great Stone Face and Lowell's Vision of Sir Launfal in the second.

SPELLING.—As in previous years, with supplementary drill on words found in the last part of Worcester's Speller in the first half, and in the whole book in the last half.

ARITHMETIC.—General review of the whole subject, emphasizing fundamental operations in fractional and denominate numbers. Second half, complete the subject to the extent of the authorized text book emphasizing mensuration and other practical applications which are given in the text book under the heading "geometry."

ALGEBRA.—The expression of quantities by algebraic symbols; the equation, including transposition of terms, solution, verification, etc.; many problems to be solved by the use of simple equations, and the addition and subtraction of integral algebraic expressions, with theory of negative quantities, the use of parentheses, factoring, etc. Second half, multiplication and division of integral algebraic expressions to page 71 in Went-

worth's "First Steps in Algebra," with review of the work of the first half. The time allowed for the mathematics, one hour per week through the year, is to be divided between arithmetic and algebra, giving to arithmetic the larger share, as is made necessary by the greater amount of work to be done. The relation of the two studies, whether they shall be taken together or alternated by days, weeks, or months, is left optional with the teacher.

LANGUAGE AND GRAMMAR.—First half, (*a*) Language.—Continue every form of exercise hitherto suggested, with special attention to paragraphing and to discrimination in the choice of words, synonyms, variety of expression, etc. In letter writing add to familiar and business letters, formal notes of invitation and answers to the same.

(*b*) Grammar.—No division of work into first half and second half is attempted. In the whole year review and extend the work of previous years.

GEOGRAPHY.—Give special attention to local geography and that of the State, and review briefly the mathematical, physical and political geography of the earth as a whole, and of the United States and other political divisions of North America. Omit geographical study in the last half of the year.

HISTORY.—First half, complete the history of the United States to date. Second half, review the whole subject.

BOOK-KEEPING.—One-half the time allotted to penmanship may be devoted to book-keeping.

NATURE STUDY.—Trees from observation. Pupils ought to be able at the end of the year to locate and describe fifty

varieties which they have seen in the city. Collections of woods are recommended.

PHYSICS.—(Optional) As outlined in the authorized text book.

HIGH SCHOOL.

FIRST YEAR.

<i>Classical Course.</i>	<i>College Course.</i>	<i>English Course.</i>
First Half Year.	First Half Year.	First Half Year.
Latin.	Latin.	Outlines of History.
Algebra.	Algebra.	Algebra.
English Lessons.	Greek History.	English Lessons.
	Eng. Half Course.	Manual Training.
Second Half Year.	Second Half Year.	Second Half Year.
Latin.	Latin.	History and Eng.
Algebra.	Algebra.	Algebra.
Physical Geog.	Roman History.	Physical Geog.
Eng. Half Course.	Eng. Half Course.	Manual Training.

SECOND YEAR.

First Half Year.	First Half Year.	First Half Year.
Cæsar.	Cæsar.	French.
Geometry.	Greek.	Geometry.
Physics.	Geometry.	Physics.
Eng. Half Course.	Eng. Half Course.	English.
		Manual Training.
Second Half Year.	Second Half Year.	Second Half Year.
Cæsar.	Cæsar.	French.
Geometry.	Greek.	Geometry.

Physics.	Geometry.	Physics.
Eng. Half Course.	Eng. Half Course.	Eng. and History.
		Manual Training.

THIRD YEAR.

First Half Year.	First Half Year.	First Half Year.
Cicero.	Cicero.	French.
French.	Greek.	Rhetoric.
Chemistry.	Coll. Physics.	Chemistry.
Arithmetic.	Coll. Mathematics.	Arithmetic.
Rhetoric.	Coll. English.	Astronomy.
	Coll. French.	Manual Training.
Second Half Year.	Second Half Year.	Second Half Year.
Cicero.	Cicero.	French.
French.	Greek.	Rhetoric.
Chemistry.	Coll. Physics.	Chemistry.
Rhetoric.	Coll. Mathematics.	Physiology.
Physiology.	Coll. English.	Const. History.
Const. History.	Coll. French.	Manual Training.

FOURTH YEAR.

First Half Year.	First Half Year.	First Half Year.
Virgil.	Virgil.	French.
French.	Greek.	German.
German.	Coll. French.	Literature.
Literature.	Coll. English.	Astronomy.
Astronomy.		
Second Half Year.	Second Half Year.	Second Half Year.
Virgil.	Virgil.	French.
French.	Greek.	German.
German.	Coll. French.	Literature.

Literature.	Coll. English.	Botany.
Geology.	Solid Geometry.	Geology.
Botany.		Solid Geometry.
Solid. Geometry.		

The following course is recommended for those who are fitting for Harvard College or Radcliffe :—

FIVE YEARS' COLLEGE COURSE.

FIRST YEAR.

First Half.	Second Half.
Latin.	Latin.
Algebra.	Algebra.
Greek History.	Roman History.

SECOND YEAR.

First Half.	Second Half.
Cæsar.	Cæsar.
Greek.	Greek.
Geometry.	Geometry.
English Half Course.	English Half Course.

THIRD YEAR.

First Half.	Second Half.
College English.	College English.
Physics.	Physics.
Cicero.	Cicero.
Greek.	Greek.

FOURTH YEAR.

First Half.

College Mathematics.
 Greek and Latin Prose, and
 History.
 College French, Half Course.
 College English.

Second Half.

College Mathematics.
 Greek and Latin Prose, and
 History.
 College French, Half Course.
 College English.

FIFTH YEAR.

First Half.

Virgil.
 College French.
 College Physics.
 Homer.
 *German.

Second Half.

Virgil.
 College French.
 College Physics.
 Homer.
 *German.
 *Solid Geometry.

*Optional.

MANUAL TRAINING COURSE.

FIRST YEAR.

First Half Year.

Latin.
 Algebra.
 English (Two hours.)
 History.

Man. Training { Carpentry
 and
 Drawing.

Second Half Year.

Latin.
 Algebra.
 History and English.
 Physical Geography.

Man. Training { Carpentry
 and
 Drawing.

COURSES OF STUDY.

SECOND YEAR.

First Half Year.

Latin.

Geometry.

Physics.

English (Two hours.)

Man. Training { Wood-turning
and
Drawing.

Second Half Year.

Latin.

Geometry.

Physics.

English (Two hours.)

Man. Training { Pattern
making and
Drawing.

THIRD YEAR.

First Half Year.

French.

College Mathematics.

English.

Chemistry.

Man. Training { Forging
and
Drawing.

Second Half Year.

French.

College Mathematics.

English.

Chemistry.

Man. Training { Moulding
and
Drawing.

FOURTH YEAR.

First Half Year.

French.

German.

English.

College Physics.

Man. Training { Machine-
work and
Drawing.

Second Half Year.

French.

German.

English.

College Physics.

Solid Geometry.

Man. Training { Machine-
work and
Drawing.

NOTES.

The school year is divided into two half-years. Pupils are required to take three studies each half-year unless excused on account of illness. In all courses pupils must take English, either as a full course or half-course, through the entire school attendance. In addition to this work pupils are required to take general exercises, as Elocution, Calisthenics, Military Drill and Music. Each pupil must complete six first year, six second year and six third year studies, making a total of eighteen for a three years' diploma. For a four years' diploma, he must complete six fourth year studies additional, making a total of twenty-four.

Pupils who have completed sixteen, ten or four studies will be classed respectively as fourth year, third year or second year students. Those who have completed a less number for each year will be classed respectively as third year, second year and first year students.

The English Course covers a period of three years ; a fourth year may be added. It is intended for those pupils who desire a special preparation for business.

The Classical Course covers a period of four years, and includes the general studies of a High School. It furnishes preparation for admission to the Normal School ; and with the Mathematics of the College Course, furnishes preparation for the Institute of Technology, the Lawrence Scientific School, and other institutions of similar character.

The College Course furnishes preparation for admission to any American College, and may be completed in four or five years, at the option of parents or guardians.

Normal School Course. Mr. Coburn, Principal of the Lowell Normal School, is authority for the following selections, to be made from the Classical Course, as affording the best preparation for the Normal School. First year : Latin, Algebra, English Lessons I, Physical Geography, English Half-course I. Second year : Cæsar, Geometry, Physics and English Half-course II. Third year : French I, Chemistry, Arithmetic, Rhetoric, Physiology, Constitutional History. Fourth year : French II, Literature, Astronomy, Geology and Botany.

ROLL OF TEACHERS.

GIVING NAME, GRADE, RESIDENCE, DATE OF ELECTION, AND SALARY.

HIGH SCHOOL.

Kirk and Anne Streets.

CYRUS W. IRISH, Head Master, 91 Fort Hill Avenue.....	1885	\$2500
FRANK B. SHERBURNE, Sub-Master, 58 Dover Street, <i>Language</i> .	1883	2200
MARY A. WEBSTER, 45 Varney Street, <i>Language and Mathe-</i> <i>mathics</i>	1859	900
CHARLOTTE E. DRAPER, 47 Belmont Avenue, <i>Language and</i> <i>Science</i>	1870	800
ALICE J. CHASE, 263 Fairmount Street, <i>Science and Language</i> ...	1877	800
SUSIE L. D. WATSON, 31 1-2 Dutton Street, <i>Language and</i> <i>Mathematics</i>	1885	800
ADELAIDE BAKER, 136 Myrtle Street, <i>Language</i>	1885	800
JENNIE L. ALLEN, 947 Middlesex Street, <i>Science</i>	1885	800
EMMA L. BRADLEY, 485 Westford Street, <i>Language</i>	1890	800
GERTRUDE A. RODLIFF, Chelmsford Centre, Mass., <i>English</i> ...	1890	800
MARIETTA CASSIDY, 4 Fifth Avenue, <i>Language</i>	1890	800

ROLL OF TEACHERS.

101

GEORGIANNA F. VINTON, 52 Fourth Street, <i>History</i>	1872	800
GRACE M. GOODHUE, 120 School Street, <i>History and Language</i> ..	1893	800
BESSIE E. HUNTOON, 182 Mt. Vernon Street, <i>Language</i>	1894	800
GRACE WARD, 279 Chelmsford Street, <i>Mathematics</i>	1895	800
MARY E. O'CONNOR, 9 Shedd Street, <i>English</i>	1896	800
CARL D. BURTT, 73 Fort Hill Avenue, <i>Language</i>	1895	1000
FRED R. WOODWARD, 11 Simpson Street, <i>Mathematics</i>	1895	1000
PERCIVAL G. BARNARD, 68 Harvard Street, <i>English and Latin</i> .	1897	800
HELEN M. LAMBERT, 283 Pawtucket Street, <i>Science</i>	1897	800
JOHN A. DONOVAN, 256 Branch Street, <i>History</i>	1898	800
THOS. F. FISHER, 297 E. Merrimack Street, <i>Manual Training</i> ...	1898	1000
ANNE M. DAY, 290 E. Merrimack Street, <i>English</i>	1899	650
HELEN BUTTRICK, 307 Wilder Street, <i>English</i>	1899	650
WILLARD E. EVERETT, 12 Belmont Street, <i>History and English</i> .	1899	800
FRED W. PUTNAM, 20 Willow Street, <i>Manual Training</i>	1899	800
MARY HUSSEY, 86 Thorndike Street, <i>Calisthenics, Elocution</i>	1899	500

BARTLETT GRAMMAR SCHOOL.

Wannalancit Street.

CYRUS A. DURGIN, Master, 117 Bowers Street.....	1891	\$2000
BELLE A. PRESCOTT, 9th year, 68 Mt. Washington Street.....	1878	600
CHARLOTTE M. MURKLAND, 9th year, 117 Bowers Street.....	1898	600
BELLE F. BATCHELDER, 8th year, 66 Arlington Street.....	1883	600
BLANCHE A. CHENEY, 8th year, 84 Arlington Street.....	1896	600
AMY L. TUCKE, 7th year, 111 Butterfield Street.....	1880	600
MARIA W. ROBERTS, 7th year, 167 School Street.....	1875	600
MARY E. WALSH, 6th year, 9 Corner Street.....	1897	600
CARRIE E. ERSKINE 6th year, 138 Mt. Vernon Street.....	1893	600
MARY I. HOWE, 5th year 84 Methuen Street.....	1873	600
BERTHA J. CURTIS, 5th year, 121 School Street.....	1899	600
ALICE D. SUNBURY, 4th year, 1 Spaulding Street.....	1899	450
FRANCES CLARK, 4th year, Chelmsford, Mass.....	1899	600

BARTLETT PRIMARY SCHOOL.

VIOLA G. BURR, 3rd year, 1 Spaulding Street.....	1899	\$ 600
FRANCES M. SPOONER, 2nd year, 121 School Street.....	1898	600
GRACE B. ALVORD 1st year, 113 Varnum Avenue.....	1896	500

ROLL OF TEACHERS.

MORRILL SCHOOL.

Common and Adams Streets.

NELLIE M. BROWN, Principal, 3rd year, 426 Fletcher Street....	1865	\$ 650
ANNIE M. COURTNEY, 2nd year, 24 La Grange Street.....	1887	600
AGNES T. COURTNEY, 1st year, 11 Marsh Street.....	1891	600
CHARLOTTE E. BROWN, 1st year, 426 Fletcher Street.....	1870	600
EVANGELINE C. DEMERS, Substitute, 1st year, 82 Lawrence Street		

CROSS STREET SCHOOL.

Cross Street, between Fletcher and Mt. Vernon Streets.

SARAH E. SCALES, Principal, 3rd year, 28 Ralph Street.....	1866	\$ 650
ELLEN M. WHITE, 2nd year, 1066 Middlesex Street.....	1863	600
A. GERTRUDE STILES, 1st and 2nd years, 72 Varney Street....	1895	600
KATHERINE KELLY, 1st year, 69 Arlington Street.....	1893	600

BUTLER GRAMMAR SCHOOL.

Gorham Street.

CORNELIUS F. CALLAHAN, Master, 197 Appleton Street.....	1884	\$2000
NELLIE F. MURPHY, 9th year, 85 Sherman Street.....	1878	600
MARGARET T. McCARTHY, 9th year, 647 Market Street.....	1890	600
MARY I. DONLAN, 8th year, 455 High Street.....	1890	600
ANASTASIA C. CORBETT, 8th year, 32 Highland Street.....	1887	600
MARY E. LANE, 7th year, Billerica....	1894	600
DELIA T. BRADY, 7th year, 183 Chapel Street.....	1883	600
KATE E. KELLEY, 6th year, 129 Moore Street.....	1883	600
AGNES M. FOLEY, 6th year, 37 Newhall Street.....	1887	600
ALICE C. O'BRIEN, 5th and 6th years, 24 Ames Street.....	1897	600
MARY L. McSORLEY, 5th year, 30 Ash Street.....	1879	600
JENNIE S. NOBLE, 5th year, 21 Carter Street.....	1894	600
GRACE G. MARREN, 5th year, 56 Butterfield Street.....	1896	600
SADIE E. TULLY, 4th year, 105 Westford Street.....	1897	600
HELEN E. GOOKIN, 4th year, Wamesit.....	1897	600
THERESE F. DONOGHUE, 4th year, 22 Royal Street.....	1897	600
KATHERINE M. USHER, 4th year, 465 Parker Street.....	1895	600

ROLL OF TEACHERS.

103

LYON STREET SCHOOL.

Corner Lyon and Central Streets.

ALICE T. LEE Principal, 3rd year, 12 South Walker Street.....	1878	\$ 650
ANNABEL COSTELLO, 2nd year, 293 Nesmith Street.....	1888	600
MARY J. McCARRY, 1st year, 58 Elm Street.....	1881	600
NELLIE A. HUNT, 1st year, 68 Elm Street.....	1884	600

CARTER STREET SCHOOL.

Carter Street.

ISABELLA T. VINALL, Principal, 3rd year, 11 Simpson Place...	1873	\$ 650
MARGARET J. CONNORS, 2nd year, 13 Pollard Street.....	1894	600
KATHERINE F. BRADY, 2nd year, 173 Chapel Street.....	1897	600
MARY V. JOHNSON, 1st year, 101-1 Prince Street.....	1897	600
MARGUERITE J. CRONIN, 1st year, Temporary, 228 Plain Street		

AGAWAM STREET SCHOOL.

Agawam and Barrington Streets.

MARY A. FAY, Principal, 3rd year, 115 Stackpole Street.....	1889	\$ 650
SUSAN G. NEILON, 2nd year, 135 Andrews Street.....	1895	600
ROSE DONNELLY, 1st year, 15 Hudson Street.....	1896	600

LONDON STREET SCHOOL.

Corner of London and West Streets.

LIZZIE R. MAGUIRE, Principal, 3rd year, 112 Pleasant Street	1884	\$ 650
ALICE A. MASTERSON, 1st and 2nd years, 100 Bourne Street..	1892	600
MINNIE F. HILL, 1st and 2nd years, 279 Thorndike Street.....	1887	600

WEED STREET SCHOOL.

Corner of Weed and Gorham Streets.

MARY B. McGOVERN, Principal, 3rd year, 31 Pearl Street.....	1886	\$ 650
LILLA M. McEVOY, 2nd year, 181 Moore Street.....	1893	600
MARY J. CARMICHAEL, 1st year, 27 Ellsworth Street.....	1893	600

LOWELL TRAINING SCHOOL.

Charles and Lawrence Streets.

(Telephone 531—3.)

GERTRUDE EDMUND, Principal, 74 Huntington Street.....	1895	\$2000
MABEL W. EWINGS, 127 Stackpole Street.....	1891	900
ADDIE B. MERRILL, 931 Bridge Street	1892	900
HELEN M. SHEAN, 11 Fort Hill Avenue	1891	800

CENTRAL STREET SCHOOL.

Central Street, Opposite Hudson Street.

ELIZA COWLEY, Principal, 3rd year, 420 Lawrence Street.....	1857	\$ 650
ELIZABETH G. LAWLER, 2nd and 3rd years, 260 High Street	1897	600
KATHERINE J. LAWLER, 1st and 2nd years, 260 High Street.	1885	600
HELEN A. DRURY, 1st year, 44 Walnut Street.....	1897	600

AMES STREET SCHOOL.

Corner Lawrence and Ames Streets.

AMANDA M. HADLEY, Principal, 3rd year, 89 Washington Street.....	1870	\$ 650
KATE F. MURPHY, 2nd year, 1 Carter Place.....	1885	600
MARY E. DREW, 1st and 2nd years, 36 Wamesit Street.....	1863	600
LIZZIE M. HADLEY, 1st year, 31 Royal Street.....	1869	600

EDSON GRAMMAR SCHOOL.

Highland Street.

C. W. BURBANK, Master, 130 Bowers Street.....	1872	\$2000
FRANCES M. WEBSTER, 9th year, 45 Varney Street.....	1873	600
ROSALIE T. BURNS, 8th year, Rogers Street, Corner Butman Road.....	1878	600
ANNIE E. DONOVAN, 7th year, 26 Madison Street.....	1895	600
MARY F. WARD, 7th year, 220 Fletcher Street.....	1893	600
KATE J. HAYES, 6th year, 15 Floyd Street..	1879	600

ROLL OF TEACHERS.

105

MARGIE F. MARREN, 6th year, 420 Fletcher Street.....	1886	600
SARAH J. CROSBY, 5th and 6th years, 12 Simpson Place.....	1863	600
BERTHA M. ROWLANDSON, 5th year, 11 Holyrood Avenue....	1891	600
MARY A. BALCH, 5th year, 242 Appleton Street.....	1865	600
JULIA B. RIORDAN, 4th year, 252 Pawtucket Street.....	1897	600
BERTHA McCUE, 4th year, Temporary, 217 Appleton Street....		

CHARLES STREET SCHOOL.

Charles Street, between Gorham and Chapel Streets.

ALICE T. OWENS, Principal 3rd year, 4 Belmont Street.....	1873	\$ 650
ELLA E. GARDNER, 2nd year, 109 Mansur Street.....	1871	600
ELLEN A. O'CONNELL, 1st year, 48 Mead Street.....	1896	600

COTTAGE STREET SCHOOL.

Corner Cottage and Chapel Streets.

ROSE E. McVEY, Principal, 3rd year, 46 Linden Street.....	1887	\$ 650
LIZZIE A. MOLLOY, 1st and 2nd years, 239 Gorham Street....	1887	600
MARGARET M. HARRAHAN, 1st and 2nd years, 32 Marshall Street	1882	600

ELIOT SCHOOL.

Corner Favor and Summer Streets.

ELLEN A. STILLINGS, Principal, 1st and 2nd years, 24 Belle- vue Street.....	1875	650
ELLEN A. CORBETT, 3rd year, 32 Highland Street.....	1878	600
NELLIE T. O'GRADY, 2nd year, 73 Newhall Street.....	1881	600
LOYOLA McCANN, 1st year, 17 Wentworth Avenue.....	1883	600

GREEN GRAMMAR SCHOOL.

Merrimack Street.

A. L. BACHELLER, Master, 43 Arlington Street.....	1874	\$2000
RUTH B. BAILEY, 9th year, 514 Moody Street.....	1871	600
CLARA A. HANAFORD, 8th year, 1 Spaulding Street.....	1869	600

ROLL OF TEACHERS.

ESTHER G. DONLAN, 8th year, 455 High Street.....	1897	600
LIZZIE A. NOLAN, 7th year, 301 Pawtucket Street.....	1876	600
JENNIE E. FAY, 6th year, 115 Stackpole Street.....	1891	600
MARY M. KEARNEY, 6th year, 94 Andrews Street.....	1895	600
LENA A. GOOKIN, 5th year, 20 Walden Street.....	1880	600
KATE F. MCCARTHY, 5th year, 647 Market Street.....	1889	600
ELLA J. CARLETON, 4th year, 1072 Bridge Street.....	1882	600
ANNIE T. DELAY, Temporary, 4th year, 87 Mt. Washington Street		
MARGARET F. HOWE, 4th year, Temporary, 5 Appleton Corp.		

KIRK STREET SCHOOL.

Corner Kirk and Lee Streets.

ELIZA A. DAVIS, Principal, 2nd and 3rd years, 100 Canton Street	1881	\$ 625
LAURA H. PALMER, 1st and 2nd years, 35 Thirteenth Street..	1882	600

CABOT STREET SCHOOL.

Corner Cabot and Ford Streets.

KATHERINE T. LENNON, Principal, 3rd year, 144 School Street	1885	\$ 650
MARY J. MURPHY, 2nd year, 112 Jefferson Street.....	1887	600
MARY T. WHELLEY, 1st year, 1 Fenwick Street.....	1897	600
ANNIE J. DEVINE, 1st year, Temporary, 110 Carlisle Street..		

CHEEVER STREET SCHOOL.

Cheever Street.

IDA J. CLARKE, Principal, 1st year, 118 Bartlett Street.....	1887	\$ 650
MARY E. MEEHAN, 2nd and 3rd years, 215 Worthen Street....	1891	600
ANNA A. SARGENT, 1st year, 223 Liberty Street.....	1864	600

WORTHEN STREET SCHOOL.

Worthen Street, between Market Street and Broadway.

MARY L. HILL, Principal, 3rd year, 228 Worthen Street.....	1858	\$ 650
ESTHER V. GREEN, 2nd year, 674 Broadway	1889	600

ROLL OF TEACHERS.

107

MARY J. ALGER, 1st year, 74 Branch Street.....	1868	600
MARY R. MARREN, 1st year, 420 Fletcher Street.....	1890	600

HIGHLAND GRAMMAR SCHOOL.

(Telephone 729—2.)

Pine Street.

CHARLES W. MOREY, Master, 14 Belmont Street.....	1880	\$2000
FLORA I. MOFFITT, 9th year, 352 Wilder Street.....	1887	600
MARY F. FOSS, 9th year, 215 Stevens Street	1831	600
ABBIE F. WOODWARD, 8th year, 157 Dartmouth Street.....	1869	600
ESTELLE L. WHITNEY, 8th year, 13 Oakland Street,.....	1885	600
LEONORA K. BATTLES, 7th year, 147 Howard Street.....	1895	600
NELLIE A. COBURN, 7th year, 89 Royal Street.....	1886	600
LUELLA A. WARDWELL, 5th year, 33 Dover Street.....	1870	600
MINNIE C. GRAY, 6th year, 106 Liberty Street.....	1890	600
FANNIE M. CLARK, 5th year, 33 Dover Street.....	1874	600
CARRIE M. SPRAGUE, 4th year, 147 Howard Street.....	1890	600
GRACE R. SANDERS, 4th year, 67 South Loring Street.....	1897	600
LULU TURNER, 5th year, Temporary, 24 Bellevue Street.....		
ELIZABETH T. MOORE, 4th year, Temporary, 242 Liberty Street.....		
S. BLANCHE BRIGHAM, 4th year, Temporary, 10 Manahan Street		

HIGHLAND ANNEX.

At Franklin School.

ARVILLA L. READER, 4th year, 216 Appleton Street.....	1871	\$ 600
GRACE F. WARD, 5th year, 6 Appleton Place.....	1893	600
ETTA G. BURNS, 6th year, Temporary, 154 Perry Street.....		

FRANKLIN SCHOOL.

Corner Branch and Middlesex Streets.

SARAH C. FISKE, Principal, 3rd year, 246 Appleton Street.....	1866	\$ 650
LIZZIE S. LOWE, 2nd year, 13 Nichols Street.....	1857	600
MARION J. STEVENSON, 2nd year, 63 Princeton Street.....	1878	600
KATE G. JONES, 1st year, 119 Andover Street.....	1880	600

PINE STREET SCHOOL.

Corner of Pine and Gibson Streets.

CARRIE J. BAILEY, Principal, 2nd and 3rd years, 16 Loring Street	1884	\$ 625
GRACE I. WASHBURN, 1st year, 15 Loring Street.....	1897	600

DOVER STREET SCHOOL.

Dover Street, between Middlesex and Grove Streets.

CLARA B. HORNE, Principal, 3rd year, 87 South Highland Street	1877	\$ 650
CLEMENTINE H. BOWERS, 2nd year, 18 Loring Street.....	1876	600
BERTHA GARDNER, 1st year, 32 Robbins Street.....	1887	600

MIDDLESEX VILLAGE SCHOOL.

HARRIET F. WAKEFIELD, Principal, 2 Loring Street.....	1889	\$ 625
GERTRUDE C. RING, 2nd year, 1107 Middlesex Street.....	1898	600
MAUD E. GREEN, 1st year, Temporary, 238 E. Merrimack Street		

POWELL STREET SCHOOL.

Powell Street, near Liberty Street.

VIOLA A. HAMBLETT, Principal, 1st and 2nd years, 463 School Street	1876	\$ 625
ELLEN J. PIPER, 2nd and 3rd years, 55 Coburn Avenue.....	1894	600

ABRAHAM LINCOLN GRAMMAR SCHOOL.

Chelmsford Street.

JAMES L. MELLEN, Master, Pentucket Avenue.....	1893	\$1800
MARGARET M. SPARKS, 9th year, 11 Fort Hill Avenue.....	1894	600
GRACE SCRIBNER, 8th year, 190 Liberty Street.....	1893	600
ANNA A. BURNHAM, 7th year, 11 Puffer Street.....	1894	600
IRMA V. HODGMAN, 6th year, 23 Whitney Avenue	1897	600
MARY A. GORMAN, 5th year, 180 Charles Street.....	1895	600

ROLL OF TEACHERS.

109

ELLEN L. FLOYD, 5th year, 124 Stevens Street.....	1887	600
ELLA E. PRESCOTT, 4th year, 58 Pine Street.....	1894	600
ANNIE R. CHASE, 4th year, 19 Robinson Street.....	1897	600
BRIDE T. SWEENEY, Temporary, 102 Pleasant Street.....		

HOWARD STREET SCHOOL.

Howard Street, between Chelmsford and Hale Streets.

MARION E. GREENE, Principal, 3rd year, 143 Howard Street...	1884	\$ 650
ALICE C. GREENE, 2nd year, 143 Howard Street.....	1894	600

GRAND STREET SCHOOL.

(Howard Street Annex.)

Grand Street, between Westford and Middlesex Streets.

JENNIE M. BENNETT, 1st year, 94 Dover Street.....	1885	\$ 600
MINNIE A. WILLSON, 1st year, 28 Cambridge Street.....	1887	600
MABEL E. BROWN, 1st year, Assistant, 290 Westford Street....		

PLAIN STREET SCHOOL.

Corner Plain and Powell Streets.

FLORA H. SPRAGUE, Principal, 3rd year, 598 School Street	1882	\$ 650
MARY A. FARNHAM, 2nd and 3rd years, 90 Gates Street.....	1887	600
LILLA M. STANLEY, 2nd year, 1 Horn Street.....	1897	600
LENA M. ROBINSON, 1st year, 68 South Walker Street.....	1898	500
CARRIE B. PRICE, 1st year, Temporary, 18 Hadley Street.....		

MOODY GRAMMAR SCHOOL.

Corner High and Rogers Streets.

WILLIAM S. GREENE, Master, 454 Andover Street.....	1883	\$2000
MERCENA F. WHITEHORN, 9th year, 519 Beacon Street.....	1877	600
CARRIE A. PAUL, 8th year, 60 Fort Hill Avenue.....	1891	600
FRANCES E. HARDMAN, 8th year, 263 Fairmount Street.....	1873	600
IDA L. SAMUELS, 7th year, 56 Fifth Avenue	1898	500

ROLL OF TEACHERS.

ELLA M. BREEN, 6th year, 23 Marsh Street.....	1893	600
FRANCES E. GARITY, 5th year 34 Read Street.....	1874	600
NELLIE C. MAHONEY, 4th year, 17 North Street.....	1898	500
FLORA A. OWEN, 4th and 5th years, Temporary, 84 First Street		

POND STREET SCHOOL.

Corner High and Pond Streets.

MARIETTA HILL, Principal, 3rd year, 303 East Merrimack Street	1870	\$ 650
WINIFRED HAGGERTY, 2nd year, 52 Huntington Street.....	1884	600
Street	1884	600
ADELAIDE CROWLEY, 1st year, 115 Fort Hill Avenue.....	1894	600

HIGH STREET SCHOOL.,

High Street, between Chestnut and Everett Streets.

CLARA A. EMERSON, Principal, 2nd and 3rd years, 216 Appleton Street	1869	\$ 625
ELIZABETH WORTHLEY, 1st and 2nd years, 27 Canada Street	1891	600

FAYETTE STREET SCHOOL.

Fayette Street, between Chestnut and Everett Streets.

GEORGIA A. HARNDEN, Principal 2nd and 3rd years, 149 Pleasant Street.....	1885	\$ 625
MARY A. MEEHAN, 1st and 2nd years, 100 Bourne Street.....	1895	600

SYCAMORE STREET SCHOOL.

Sycamore Street.

FLORENCE E. ROWELL, Temporary, 640 Bridge Street.....		
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PAWTUCKET GRAMMAR SCHOOL.

Mammoth Road, Pawtucketville.

WILLIAM P. BARRY, Master, 1280 Middlesex Street.....	1887	\$2000
ELLEN M. MacDONALD, 9th year, 290 East Merrimack Street..	1878	600

ROLL OF TEACHERS.

III

CARRIE M. HART, 8th year, 16 Varney Street.....	1887	600
ELIZABETH A. HART, 7th year, 16 Varney Street.....	1886	600
EFFIE I. MARSHALL 6th year, 28 Riverside Street.....	1887	600
JULIA M. HEALEY, 5th year, 108 Bowers Street.....	1870	600
GOLDIE M. GARDNER, 4th year, 56 Willie Street	1898	500

NEW MOODY STREET SCHOOL.

ELLEN M. HOLDEN, Principal, 3rd year, 21 Eighth Avenue....	1876	650
EUGENIA L. HOGAN, 2nd and 3rd years, 4 Crane's Avenue.....	1889	600
NELLIE F. DAVIDSON, 2nd year, 20 Lombard Street.....	1891	600
ALICE B. BESSE, 1st year, 581 Rogers Street.....	1891	600
FANNIE A. HARDY, 1st year, 22 Third Street.....	1890	600

LEXINGTON AVENUE SCHOOL.

Lexington Avenue, near Varnum Avenue.

HELEN KOHAWN, Ungraded, 63 Thirteenth Street.....	1877	\$ 625
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VARNUM GRAMMAR SCHOOL.

Myrtle Street, Centralville.

HENRY H. HARRIS, Master, 26 Massachusetts Corporation....	1893	\$1800
ELIZABETH C. KENNEDY, 9th year, 42 Eighteenth Street....	1884	600
MARY F. WING, 9th year, 99 Third Street	1879	600
ELIZABETH F. BLANDIN, 8th year, 61 Durant Street.....	1896	600
GRACE W. BALCH, 7th year, 434 Westford Street.....	1894	600
ALICE M. MAGOON, 7th year, 215 Stackpole Street.....	1898	500
ALICE R. KEESE, 6th year, 4 Sanborn Street.....	1881	600
MARY A. FAY, 6th year, 303 Tenth Street	1898	500
AGNES T. FAY, 6th year, 303 Tenth Street.....	1891	600
ELIZABETH F. GARRA, 5th year, 109 Bartlett Street.....	1893	600
ADA E. HOOLE 5th year, 173 Warren Street.....	1894	600
ROSA A. DOWD, 5th year, 237 Tenth Street.....	1884	600
JULIA WILLIAMS, 4th year, 640 Bridge Street.....	1886	600
GERTRUDE L. SPONHOLTZ 4th year, 654 School Street.....	1898	500
AGNES BAILEY, 8th year, Temporary, 53 Third Street.....		
DAISY B. MacBRAYNE, 7th year, Temporary, 24 Beech Street.		
ELIZABETH M. BUTLER, 4th year, Temporary, 142 Third Street		

WEST SIXTH STREET SCHOOL.

West Sixth Street, between Coburn and Jewett Streets, Centralville.

STELLA J. ALLEN, Principal, 3rd year, 115 Third Street.....	1879	\$ 650
LIZZIE F. LAMERE, 2nd and 3rd years, 829 Bridge Street.....	1885	600
MARION S. KEYES, 2nd year, 102 Third Street.....	1888	600
MARY J. CALLAHAN, 1st year, 117 Durant Street.....	1895	600
MAUDE M. HARDY, 1st year, Assistant, 24 Cambridge Street..		

TENTH STREET SCHOOL.

Corner Tenth and Varnum Streets, Centralville.

MARY F. BEANE, Principal, 3rd year, 212 Tenth Street.....	1879	\$ 650
FANNIE H. MURPHY, 2nd and 3rd years, 42 Twelfth Street..	1889	600
ALICE A. HOLTHAM, 1st and 2nd years, 1107 Bridge Street....	1887	600
ELLA A. BAILEY, 1st year, 118 Sixth Street	1869	600

LAKEVIEW AVENUE SCHOOL.

Lakeview Avenue, Centralville.

MARGARET J. McCLUSKEY, 2nd year, 161 Lakeview Avenue..	1890	\$ 600
LILLIAN C. WHOLEY, 1st year, 359 Stevens Street.....	1894	600
MARTHA ROGERS, 1st year, 131 Cumberland Road.....	1895	600
CORINNA G. COVER, 3d year, Temporary, 16 Lombard Street...		
ELSIE M. PUFFER, 1st year, Assistant, 942 Middlesex Street...		

BILLINGS STREET SCHOOL.

MALVINA LAMERE, Principal, 1st year, 6 West Eleventh Street	1894	\$ 625
ANNIE M. ROBBINS, 2nd and 3rd years, 62 Twelfth Street.....	1895	600
ETTA FOYE, 2nd year, Temporary, 127 Durant Street.....		

KINDERGARTENS.

VARNUM SCHOOL.

NETTIE M. CONANT, Principal, 21 Osgood Street.....	1892	\$ 500
CLARA M. EVERETT, 945 Middlesex Street	1896	450
JOSEPHINE GOULD, 162 Branch Street	1897	450

DOVER STREET.

ELIZABETH A. WILSON, 15 South Canton Street.....	1893	\$ 500
EDITH A. ANDREWS, 77 Fort Hill Avenue	1897	450

MOODY SCHOOL.

MARY C. WALKER, Principal, 100 Appleton Street.....	1893	\$ 500
EDITH A. HOWITT, 95 Myrtle Street	1897	450
ALICE F. SEETON, Temporary, 30 Third Avenue.....		

PINE STREET.

LOUIE I. SMITH, Principal, 69 Nichols Street.....	1895	\$ 500
KATHERINE M. CROWLEY, Temporary, 115 Fort Hill Avenue		

CHARLES STREET.

MABEL D. NICKERSON, Principal, 136 Chestnut Street.....	1893	\$ 500
ETHEL BAKER, 53 Chelmsford Street	1899	350

BARTLETT SCHOOL.

E. BELLE PERHAM, Principal, 100 Riverside Street.....	1893	\$ 500
CLARE S. REED, 11 Nesmith Street, ...	1896	450

AGAWAM STREET.

SARAH G. SPARKS, Principal, 59 Elm Street.....	1894	\$ 500
GERTRUDE A. ROBERTS, 182 Stevens Street.....	1897	450

LINCOLN SCHOOL.

ELSIE M. CRAGIN, Principal, 114 South Walker Street.....	1895	\$ 500
ROSEMARY LENNON, 39 Carter Street, ...	1895	450
AGNES E. COBURN, Temporary, 47 Methuen Street.....		

CHAPEL STREET.

MARIETTA G. GORMLEY, Principal, 22 Lyon Street	1895	\$ 500
KATHERINE C. EARLEY, 172 Concord Street.....	1896	450

ROLL OF TEACHERS.

FRANKLIN SCHOOL.

N. GRACE TAYLOR, Principal, 118 Bartlett Street.....	1895	\$ 500
HORTENSE LAMERE, 6 West Eleventh Street	1899	350

PAWTUCKET.

M. MARIETTA KING, Principal, 223 Stackpole Street.....	1895	\$ 500
S. HORTENSE TABOR, 82 Riverside Street.....	1896	450

WORTHEN STREET.

HELEN W. NOYES, Principal, 49 Nesmith Street.....	1896	\$ 500
S. ALICE KNAPP, 407 Moody Street..	1899	350

SUPERVISOR OF KINDERGARTENS.

ANNA W. DEVEREAUX, 73 Nesmith Street.....	1893	\$ 500
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TEACHER OF PENMANSHIP.

THOMAS M. GRAVES, 112 Llewellyn Street.....	1883	\$1250
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MUSICAL DIRECTOR.

FREDERICK O. BLUNT, 50 Chelmsford Street.....	1898	\$1100
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TEACHER OF DRAWING.

OLIVE E. UNDERHILL, 117 Branch Street.....	1887	\$1250
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TEACHER OF SEWING.

IDA J. FLINT, 200 Liberty Street.....	1880	\$ 800
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MILITARY INSTRUCTOR.

ALEXANDER GREIG, Jr., Philippine Islands	1891	\$ 250
WILLIAM FAIRWEATHER, Substitute, 756 School Street.....		

TRAINING SCHOOL GRADUATES.

CLASS OF JUNE, 1897.

Marguerite J. Cronin, 228 Plain Street.
 Grace C. Delaney, 791 Broadway.
 Annie T. Delay, 87 Mt. Washington
 Street.
 Mabel H. Ela, 407 Walker Street.
 Margaret C. Fox, 8 Eddy Street.
 Julia G. Halloran, 546 E. Merrimack
 Street.
 Daisy B. MacBrayne, 24 Beech Street.
 Helen J. O'Hearn, 649 Westford Street.
 Bride T. Sweeney, 102 Pleasant Street.
 Carrie B. Price, 18 Hadley Street.
 Lulu Turner, 24 Bellevue Street.

CLASS OF FEBRUARY, 1898.

Agnes Bailey, 53 Third Street.
 Evangeline C. Demers, 82 Lawrence
 Street.
 M. Josephine Donehue, 891 Bridge
 Street.
 Addie E. Edwards, 24 Bellevue Street.
 Maud E. Green, 238 E. Merrimack
 Street.
 Margaret F. Howe, 5 Appleton Corp.
 Bertha McCue, 217 Appleton Street.
 Flora A. Owen, 84 First Street.
 Florence E. Rowell, 640 Bridge Street.
 Harriet L. Wheeler, 148 Pleasant Street.

CLASS OF JUNE, 1898.

S. Blanche Brigham, 10 Manahan
 Street.
 Mabel E. Brown, 290 Westford Street.
 Etta G. Burns, 154 Perry Street.

Annie J. Devine, 110 Carlisle Street.
Etta Foye, 127 Durant Street.
Julia A. Kenney, 99 Washington Street.
Katherine H. Law, 947 Middlesex Street.
Sadie F. McCort, 397 Worthen Street.
Elizabeth T. Moore, 242 Liberty Street.
Annie S. Murphy, 1 Carter Place.

CLASS OF FEBRUARY, 1899.

Elizabeth M. Butler, 142 Third Street.
Corinna G. Cover, 16 Lombard Street.
Maude M. Hardy, 24 Cambridge Street.
Josie V. Hoar, 87 Mt. Washington
Street.
Delia C. Maloney, 79 Elm Street.
Elizabeth A. Page, 647 Market Street.
Elsie M. Puffer, 942 Middlesex Street.
Mary E. Snow, 89 School Street.

SALARIES OF TEACHERS.

HIGH SCHOOL.

Head Master.....	\$2500 00
First Sub-Master.....	2200 00
Men Assistants.....	800 00 to 1500 00
First Woman Assistant.....	900 00
Other Women Assistants, first year.....	650 00
Assistants, second year.....	700 00
Assistants, third year.....	800 00

GRAMMAR SCHOOLS.

Masters	\$1300 00 to \$2000 00
Assistants, first year.....	450 00
Assistants, second year.....	500 00
Assistants, third year and after.....	600 00
Teacher of Penmanship.....	1250 00
Teacher of Drawing.....	1250 00
Teacher of Music.....	1100 00

PRIMARY SCHOOLS.

Teachers, first year.....	\$450 00
Teachers, second year.....	500 00
Teachers, third year and after.....	600 00
Principals of two rooms.....	625 00
Principals of three rooms or more.....	650 00

TRAINING SCHOOL.

Principal	\$2000 00
Two Assistants.....	900 00
One Assistant.....	800 00

KINDERGARTENS.

Principals	500 00
Assistants, first year.....	350 00
Assistants after first year.....	450 00

TEMPORARY TEACHERS.

Men Teachers, for every school-day's service.....	\$3 00
Women Teachers in High School, for every school-day's service.....	1 75
Women Teachers in other schools, for every school-day's service....	1 25
Graduates of Training School	2 25

EVENING SCHOOLS.

Principal, High School, per evening.....	\$5 00
Principals, Elementary Schools, per evening	2 00
Assistants, High School, per evening.....	2 00
Assistants, Elementary Schools, per evening.....	1 25

TEXT-BOOKS USED IN THE PUBLIC SCHOOLS

PRIMARY SCHOOLS.

First Reader, New Franklin Series.	Monroe's Reading Chart.
Second Reader, New Franklin Series.	American Music Reader.
Advanced 2nd Reader, New Franklin Series.	American Music Chart.
	Blaisdell's Child's Book of Health.
Franklin Primary Arithmetic.	Heath's Vertical Writing Books.

GRAMMAR SCHOOLS.

Third Reader, New Franklin Series.	Southworth and Goddard's Grammar.
Fourth Reader, New Franklin Series.	Butler's Elementary Geography.
Intermediate Reader, New Franklin Series.	Butler's Grammar School Geography.
	Frye's Primary Geography.
Fifth Reader, New Franklin Series.	Frye's Common School Geography.
Scudder's Fables and Folk Stories.	Eggleston's First Book in American History.
De Foe's Robinson Crusoe.	
Burrough's Birds and Bees.	Scudder's History and Short History of the United States.
Hawthorne's Wonder Book.	
American Literature, Masterpieces.	Fiske's History of the United States.
Bradbury's Eaton's Practical Arithmetic.	Thomas's History of the United States.
Tarbell's Lessons in English.	Montgomery's Beginner's American History.

Union Series of Physiologies.
 Wentworth's Elementary Algebra.
 Worcester's New Pronouncing Speller.
 The Morse Speller.
 The Rational Spelling Book.
 Reed's Word Lessons.

Worcester's Comprehensive Dictionary.
 Werner's Mental Arithmetic.
 Heath's Vertical Writing Books.
 American Music Readers.
 Meservey's Book-keeping.

HIGH SCHOOL.

CHEMISTRY, PHYSICS AND OTHER SCIENCES.

Elements of Chemistry, Avery.
 Elements of Chemistry, Shepard.
 Qualitative Analysis, Irish.
 A Text-book of Physics, Hall-Bergen.
 Elements of Physics, Avery.
 Physics by Experiment, Shaw.
 School Physics, Avery.
 Botany, Gray.
 Dana's Geological Reader.
 Geology, Le Conte.

Herbarium, Wilson.
 Lessons in Astronomy, Young.
 Physiology, Kellogg.
 Physiology, Overton.
 Physiology, Blaisdell.
 Physiology, Foster and Stone.
 Physiology, Martin.
 Physiology, Walker.
 Tarr's Physical Geography.

ENGLISH.

Ancient Mariner, Coleridge.
 Burke's Speeches, Delby.
 Carlyle's Essay on Burns.
 Christmas Carols, Dickens.
 Classics, Hawthorne.
 Conciliation with America, Burke.
 Cooper's Last of the Mohicans.
 De Foe's History of the Plague, Carpenter.
 De Quincey's Revolt of the Tartars.
 Eliot's Silas Marner, Norris.
 English Composition, Shaw.
 English Grammar, Meiklejohn.
 Exercises in English, Strong.
 First Bunker Hill Oration, Webster.
 Foundations of Rhetoric, Hill.
 Guy Mannering, Scott.
 Hand-book of English Literature, Underwood.

House of the Seven Gables, Hawthorne.
 Hereward the Wake, Kingsley.
 Homer's Iliad, Church.
 Iliad, Dryden.
 Irving's Tales of a Traveler, Carpenter.
 Ivanhoe, Scott.
 Kenilworth, Scott.
 Lady of the Lake, Scott.
 Lessons in English, Buehler.
 Lessons in English.
 Lessons in English, Lockwood.
 Life of Samuel Johnson, Macauley.
 Macbeth, Shakespeare.
 Manual of English Literature, Arnold.
 Merchant of Venice, Shakespeare.
 Milton and Addison, Macauley.
 Milton's Lyrics, Hodgkins.
 Under-Palamon and Arcite, Dryden.
 Paradise Lost, Milton.

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| Pope's Iliad. | Tales of a Wayside Inn, Longfellow. |
| Principles of Rhetoric, Hill. | Talisman, Scott. |
| Scott's Marmion, Dalgleish. | Tanglewood Tales, Hawthorne. |
| Selected American Poems. | Thanatopsis, Bryant. |
| Selected Ballads and Lyrics, Lodge. | The Classic Myths. |
| Select Essays of Macauley, Chalmers. | The Princess, Tennyson. |
| Shakespeare's Plays, Hudson. | Twice Told Tales, Hawthorne. |
| Sir Roger de Coverley Papers, Addison. | Vicar of Wakefield, Goldsmith. |
| Sketch Book, Irving. | Westward Ho, Kingsley. |
| Southey's Life of Nelson. | Wonder Book, Hawthorne. |
| Story of the Odyssey, Church. | Woodstock, Scott. |
| Tales from Shakespeare, Lamb. | Young Folk's Plutarch, Rosalie Kaufman. |

FRENCH.

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|--|---|
| Bug-Jargal, Hugo. | French Dictionary, Heath. |
| Capi et sa Troupe. | French Grammar, Grandgent. |
| College Plays, Bocher. | French Grammar, Otto-Bocher. |
| Complete French Course, Chardenal. | French Grammar, Worman. |
| Contes et Legendes, Guerber. | French Lyrics, Bowen. |
| Easy French Readings, Fisher. | French Reader, Super. |
| Exercises, No. 1, Grandgent. | Grammaire Francaise, Larive et Fleury. |
| La Belle Nivernaise, Daudet. | 2me An. |
| La Famille de Germandre, Sand. | Sight Reading, Rogers. |
| La Fontaine's Fables, Mme. Beck's Edition. | Le Conscrit de 1813, Erckmann-Chatrain. |
| La Siege de Berlin. | Le Cure de Tours, Balzac. |
| La Tache du Petit Pierre. | Les Precieuses' Ridicules, Moliere. |
| La Voyage de Monsieur Perrichon, Labiche. | Methode Berlitz, Part I. |
| French Composition, Grandgent. | Methode Berlitz, Part II. |
| | Pecheur d'Islande, Loti. |
| | Readings from French History, Super. |

GERMAN.

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|---|----------------------------|
| Berlitz Reader. | German Dictionary, Elwell. |
| Die Schonsten Deutschen Lieder, Wenckebach. | German Grammar, Otto. |
| Eisenbach's German Lessons, Collar. | Immense, Storm's. |

GREEK.

Anabasis.	Greek Lexicon, Liddell and Scott.
Greek Composition, Higley.	Greek Lexicon, White.
Greek Composition, Woodruff.	Greek Reader, Goodwin.
Greek Grammar, Goodwin.	Homer's Iliad, Seymour.
Greek Lessons, White.	

HISTORY.

Ancient History, Myers.	History of Greece, Pennell.
English History, Montgomery.	History of Rome, Allen.
Fiske's School Histories.	Johnston's American History.
General History, Myers.	Outlines of History, Swinton.
Greek History, Oman.	Sanderson's History.

LATIN.

Caesar, Allen and Greenough.	Latin Lexicon, White.
Cicero, Allen and Greenough.	Nepos, Barss.
First Latin Book, Collar and Daniell.	New Latin Composition.
Gate to Caesar, Collar.	Ovid, Allen and Greenough.
Latin Composition, Part I, Daniell.	Sallust.
Latin Composition, Part II, Daniell.	Virgil, Allen and Greenough.
Latin Composition, Collar.	Virgil, Brice.
Latin for Sight Reading, Tomlinson.	Viri Romae, Rolfe.
Latin Grammar, Allen and Greenough.	

MATHEMATICS.

Academic Algebra, Wells.	Higher Algebra, Wells.
Arithmetic, Wentworth and Hill.	Surveying, Davies.
Geometry, Plane and Solid, Wentworth.	Trigonometry, Bradbury.
Geometry, Wells.	

SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS OF THE CITY OF LOWELL FOR THE YEAR ENDING DECEMBER, 1899.

SCHOOLS.		LOCATION.																									
High.....	Bartlett (Gram).. PRIMARIES. Cross St..... Morrill	Whole No. Enrolled.		No. of pupils belonging Dec., 1899.		Whole No. of pupils on time-books since Jan. 1, 1899.				Average No. of pupils belonging to school. #		Average % daily attendance.			No. entered not rec'd from any other pub. school.	Rec'd from other pub. schools of lower grade.	Rec'd from other grade schools of same grade.	Sent to other public sch's of higher grade.	No. having certificates of schooling for mills.	No. over 14 years of age.	No. between 10 and 14 years of age.	No. between 6 and 10 years of age.	Number under 6 years of age.	Percent. of attendance.			
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.														
		372	465	837	368	436	804	511	638	1149	355	459	814	351	425	776	63	312	0	21	0	0	1109	40	0	95	
		312	229	541	228	201	429	376	293	669	234	190	424	217	172	389	126	90	38	48	18	0	234	398	37	0	92
		160	68	198	79	77	156	127	101	228	83	70	153	78	65	143	83	6	24	36	18	0	0	16	165	47	93
		250	90	340	116	61	177	270	98	368	141	59	200	129	53	184	183	0	28	36	19	0	5	67	252	44	92
		89	80	169	64	72	136	108	109	217	65	58	123	57	50	107	53	23	25	32	16	0	2	37	152	26	57
		439	268	707	259	210	469	505	308	813	289	187	476	264	170	434	319	29	77	104	53	0	7	120	569	117	91
		387	372	759	351	327	678	474	453	927	346	324	670	322	304	626	60	143	25	69	22	0	172	609	146	0	93
		71	69	140	61	62	123	92	91	183	56	57	113	53	54	107	33	20	23	27	13	0	0	13	143	27	94
		152	138	290	116	104	220	170	152	322	123	104	227	113	94	207	102	7	25	39	35	0	0	48	923	51	91
		91	75	166	65	56	121	105	88	193	63	57	121	53	57	110	54	1	26	33	18	0	0	11	110	72	90
		112	80	192	103	64	167	129	93	222	87	62	149	82	57	139	94	0	30	33	12	0	1	60	91	70	93
		83	80	163	54	53	107	93	83	176	64	51	115	61	47	108	55	0	13	41	9	0	0	5	143	28	94
		509	442	951	399	339	738	589	507	1096	394	331	725	362	309	671	338	28	117	173	87	0	1	137	710	248	92
		169	159	328	162	145	307	221	217	438	160	147	307	145	130	275	35	88	22	21	13	11	87	313	38	0	90
		88	90	178	68	74	142	108	99	207	69	70	139	64	65	129	71	10	19	27	0	0	0	49	132	26	93
		96	107	203	81	87	168	112	122	234	73	83	159	70	73	143	33	7	24	34	21	0	0	37	134	63	90
		126	121	247	90	91	181	138	132	310	85	82	167	74	70	144	68	23	40	12	39	0	1	45	234	30	86
		310	318	628	239	252	491	378	373	751	230	235	465	208	208	416	172	40	83	73	87	0	1	131	500	119	89

SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS.—Continued.

Edson (Gram)..... PRIMARIES.	221	255	476	203	214	417	272	302	574	200	220	420	185	205	380	333	70	28	29	20	5	127	399	48	0	33
Charles St., near Gorham St.....	112	81	193	77	61	138	130	111	241	80	70	150	76	64	140	31	0	48	32	47	1	2	33	165	40	94
Cor. Cottage and Chapel Sts.....	56	81	137	68	68	133	92	94	186	61	65	126	56	59	115	36	18	31	15	19	0	0	22	116	48	91
Cor. Summer and Favor Sts.....	120	126	246	78	67	145	151	139	290	73	75	148	68	66	134	150	2	42	24	44	2	4	50	204	32	91
Totals for Primaries.....	288	288	576	220	196	416	373	344	717	214	210	424	200	189	389	217	20	121	71	110	3	6	105	486	120	92
Green (Gram)..... PRIMARIES.	354	258	592	306	235	541	424	322	746	298	236	534	280	218	498	134	123	31	33	29	5	184	484	78	0	93
Cabot St.....	158	130	288	76	65	141	176	137	313	77	62	139	68	56	124	154	0	25	29	20	1	24	86	179	24	89
Cor. Cheever and Tucker Sts.....	149	82	231	54	31	85	148	84	232	57	32	89	50	29	79	231	0	1	12	12	23	23	65	59	88	89
Kirk St.....	73	45	118	48	28	76	92	69	151	47	27	74	43	23	66	55	4	29	23	20	0	3	37	97	14	89
Worthen St.....	171	140	311	104	89	193	207	163	370	99	83	182	91	76	167	129	24	35	55	47	0	3	53	220	94	91
Totals for Primaries.....	551	397	948	282	213	495	623	443	1066	280	240	484	232	184	436	569	28	90	119	99	24	53	241	581	191	90
Highland (Gram)..... PRIMARIES.	384	384	768	330	357	687	455	468	923	332	346	672	306	311	617	56	116	39	72	43	0	259	588	76	0	96
Dover St.....	65	83	148	54	70	124	80	101	181	51	62	113	45	60	105	19	25	8	36	13	0	0	4	145	32	43
Cor. Pine and Gibson Sts.....	41	48	89	35	40	75	47	59	106	35	37	72	31	33	64	11	10	7	16	10	0	0	3	99	4	90
Junction of Branch and Middlesex Sts..	120	106	226	89	62	151	153	142	295	86	78	164	77	67	144	93	22	47	32	50	2	5	67	213	10	87
Plain St.....	104	143	307	120	106	226	181	159	340	113	104	217	106	95	201	61	9	24	30	39	0	1	63	287	49	91
Powell St.....	58	45	103	38	28	66	70	50	130	40	31	71	36	29	65	27	4	13	28	10	0	0	16	90	14	91
Totals for Primaries.....	448	425	873	336	306	642	531	511	1042	325	312	637	235	284	579	211	70	99	151	122	2	6	153	774	109	91
A. Lincoln (Gram)..... PRIMARY.	191	214	405	175	203	378	246	261	507	177	200	377	165	185	350	25	70	32	32	28	0	150	324	33	0	93
Howard St., near Hale St.....	151	131	282	126	103	229	184	156	340	113	96	209	100	82	182	120	18	40	28	26	2	5	39	229	67	87
Totals for Primary.....	151	131	282	126	103	229	184	156	340	113	96	209	100	82	182	120	18	40	28	26	2	5	39	229	67	87
Moody (Gram)..... PRIMARIES.	193	189	382	172	165	337	238	230	468	173	164	337	138	150	308	37	63	23	45	16	6	109	250	109	0	91
Fayette, bet. Chestnut and Everett Sts..	47	42	89	28	27	55	58	51	109	28	28	56	25	25	50	37	0	20	8	28	0	0	30	60	19	89
High St.....	62	41	103	46	28	74	75	57	132	43	31	74	39	29	68	23	11	18	21	0	0	21	81	30	92	89
Oaklands.....	37	22	59	15	16	31	38	25	63	23	14	37	19	12	31	22	0	4	12	5	0	0	1	52	10	85
Cor. Pond and High Sts.....	81	65	146	76	47	123	111	88	199	68	51	119	60	44	104	22	29	24	38	16	0	0	10	154	35	88
Totals for Primaries.....	227	170	397	165	118	283	282	221	503	162	124	286	143	110	253	104	40	66	76	70	0	0	62	347	94	88
Cor. Mammoth Road and Fourth Ave....	141	145	286	119	129	248	168	178	346	121	123	244	118	118	236	52	38	22	17	24	5	89	230	27	0	97
Moody St., opp. Fourth Ave.....	132	147	279	104	109	213	152	164	316	96	107	203	87	95	182	65	23	14	38	18	0	0	26	250	40	90
Totals for Primary.....	132	147	279	104	109	213	152	164	316	96	107	203	87	95	182	65	23	14	38	18	0	0	26	250	40	90

SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS.—Continued.

SCHOOL.		LOCATION.		No. of pupils belonging Dec., 1892.		Whole No. of pupils on time books since Jan. 1, 1899.		Average No. of pupils belonging to School.		Average daily attendance.		No. enrolled from other pub. school.		No. having certificates of schooling for mths.		No. between 6 and 10 years of age.		Number under 6 years of age.		Per cent. of attendance.	
Whole No. Enrolled.		Total.		Males.		Females.		Total.		Males.		Females.		Total.		Males.		Females.		Total.	
Varnum (Gram.)..	387	369	756	310	321	631	471	448	919	316	320	636	295	296	591	115	132	31	61	27	36
PRIMARIES.																					
Billings St., near Hildreth St.	75	70	145	70	49	119	92	78	170	68	50	118	63	46	109	22	4	21	25	11	0
Lakeview Ave.	150	136	286	112	92	204	176	130	320	97	78	175	86	67	153	171	0	34	31	16	11
West Sixth St.	155	103	258	103	88	191	173	127	300	101	76	177	91	67	158	87	11	31	36	38	0
Tenth St.	107	127	234	89	91	180	139	154	293	83	93	176	75	82	157	51	20	39	55	25	0
Totals for Primaries.																					
	487	436	923	374	320	694	574	509	1083	349	297	646	315	262	597	331	35	125	137	90	1
MIXED SCHOOLS.																					
Middlesex Village	62	74	136	41	48	89	65	77	142	42	50	92	35	43	78	136	0	6	0	20	3
Lexington Ave.	25	19	44	15	14	29	26	19	45	15	13	28	14	12	26	44	0	1	9	5	0
Totals for Mixed Schools.																					
	87	93	180	56	62	118	91	96	187	57	63	120	49	55	104	180	0	7	9	25	3
KINDERGARTENS.																					
Agawam St., Primary School Building.	33	37	70	13	17	30	33	37	70	16	20	36	14	16	30	70	0	0	20	1	0
Varnum School, Centralville.	52	67	119	30	35	65	53	69	122	30	34	64	24	28	52	119	0	3	36	0	0
Cor. Chapel and Keene Sts.	52	42	94	21	19	40	53	44	97	22	16	38	20	14	34	97	0	3	42	1	0
Dover St., bet. Branch and Grove Sts.	41	42	83	15	23	38	41	43	84	17	20	37	14	15	29	13	0	1	27	3	0
Barlett school Bldg., Wannanacott St.	41	37	78	11	23	34	47	37	84	13	18	31	10	15	25	43	0	6	23	0	0
Franklin School Building, Branch St.	53	42	95	27	15	42	53	42	95	24	18	42	20	13	33	94	0	1	23	1	0
A. Lincoln.	55	69	124	21	39	60	55	69	124	22	28	50	19	22	41	123	0	1	26	0	0
Moody School Building, Chelmsford St.	58	59	117	34	23	57	58	60	118	24	25	49	16	15	31	117	0	1	43	3	0
Pawtucket School Building, Rogers St.	45	38	83	23	18	41	45	38	83	19	17	36	15	12	27	83	0	0	22	0	0
Primary School Building, Charles St.	43	37	80	21	17	38	43	38	81	17	15	32	14	12	26	80	0	1	20	0	0
Worthen St. School Building.	46	57	103	19	25	44	50	55	105	18	19	37	12	15	27	105	0	2	8	2	0
Cor. Pine and Gibson Sts.	17	20	37	14	15	29	18	22	40	9	13	22	7	10	17	96	0	3	0	1	0
Totals for Kindergartens.																					
	536	547	1083	249	269	518	549	554	1103	231	243	474	185	187	372	940	0	22	292	12	0
SUMMARY.—High School.																					
Grammar Schools.	372	465	837	308	436	804	511	698	1149	355	459	814	351	425	776	63	312	0	21	0	0
Primary Schools.	2719	2574	5293	2402	2286	4688	3345	3172	6517	2357	2264	4621	2191	2089	4280	673	933	291	420	68	1618
Mixed Schools.	3542	3022	6564	2359	2089	4448	4101	3536	7727	57	63	120	49	55	104	2446	331	832	970	762	32
Totals, not including Kindergartens.																					
	6720	6154	12874	5185	4873	10058	8138	7442	15580	5221	4889	10110	4817	4402	9279	3362	1576	1130	1427	1027	103



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